

# Resurfacing Lower Deck Paving & Striping (Contract No. 04-025204)

The as-built drawings, which are contained in these CDs, are scanned from drawings of the existing structure for the convenience of the contractor and as a means to convey to the contractor the available information regarding the existing structure. It is to be understood that no claim is being made as to the accuracy or completeness of the said information and that the State of California or its officers or agents shall not be responsible for the manner in which the contractor interprets and uses this information or for the accuracy, currency or completeness of these scanned as-built drawings. The contractor shall be responsible to obtain, at the contractor's expense, any additional information that the contractor deems necessary for completely and accurately assessing the existing conditions of the structure. The contractor shall not be entitled to any compensation for any claim arising from inaccuracy or insufficiency of these as-built drawings or in anyway related to these drawings.

- [1. Title Sheet](#)
- [2. SFOBB 36+00 to SFOBB 49+60](#)
- [3. SFOBB 49+60 to SFOBB 197+00](#)
- [4. SFOBB 197+00 to SFOBB 286+00](#)
- [5. SFOBB 286+00 to SFOBB 315+00](#)
- [6. Miscellaneous Details I](#)
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- [8. Traffic Stripes and Pavement Markings](#)
- [9. L 44+00 to SFOBB 106+75](#)
- [10. SFOBB 106+75 to SFOBB 155+00](#)
- [11. SFOBB 166+00 to SFOBB 221+50](#)
- [12. SFOBB 221+50 to SFOBB 276+00](#)
- [13. Layout and Details-Pier W1 West](#)
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- [21. Concrete Barrier Type 50 \(SDA75-B.3\)](#)

STATE OF CALIFORNIA  
BUSINESS AND TRANSPORTATION AGENCY  
DEPARTMENT OF TRANSPORTATION

04 SF 80  
ALA 80

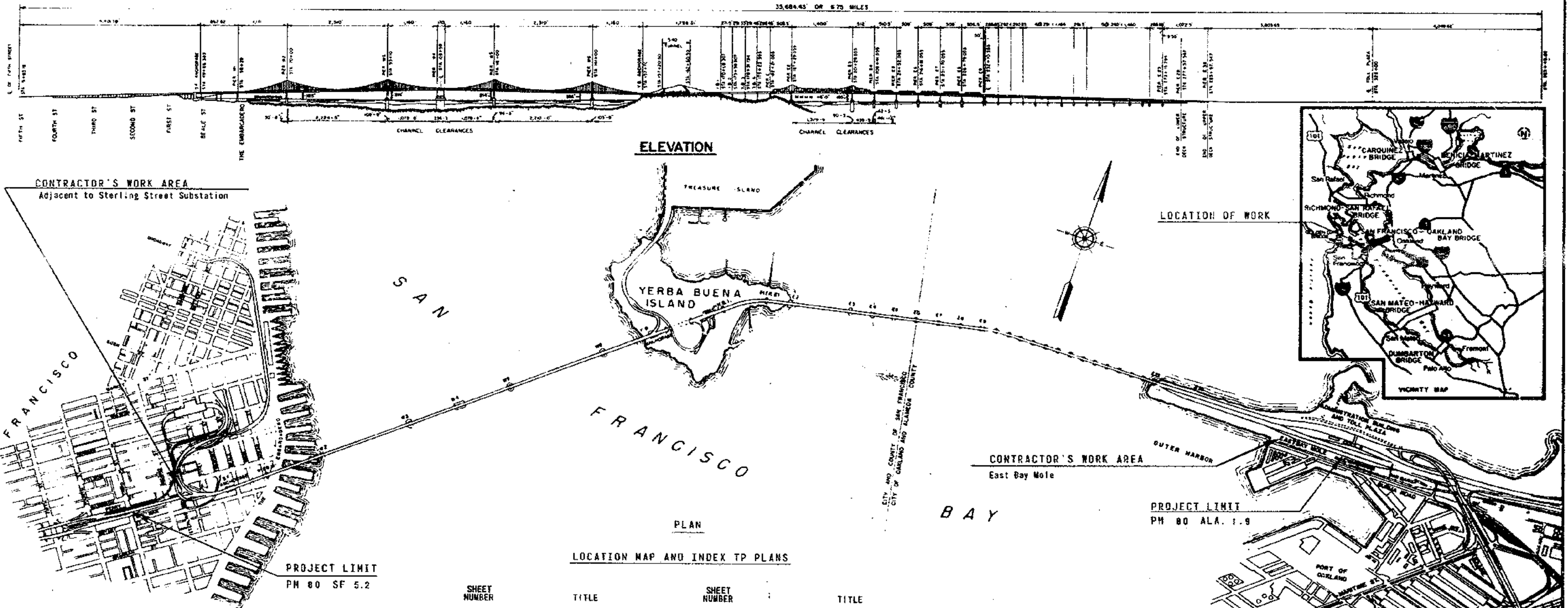
PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY

IN SAN FRANCISCO AND ALAMEDA COUNTIES, IN SAN FRANCISCO AND OAKLAND,

ON THE SAN FRANCISCO - OAKLAND BAY BRIDGE

To be supplemented by Standard Plans dated January 1975

*Med. Robin*  
CHIEF, PROJECT DEVELOPMENT DIVISION  
REGISTERED CIVIL ENGINEER NO. 9532  
APPROVED January 17, 1977



GENERAL NOTES

- Contractor shall verify all dependent dimensions in the field.

SHEET NUMBER	TITLE	SHEET NUMBER	TITLE
1.	Project Plan and Elevation PAYING AND STRIPING	13.	Layout and Details - Pier W1 West
2.	L 36-00 to SF08B 49-60	14.	Layout and Details - Piers W1 East, W4 and Y.B. Anchorage
3.	SF08B 49-60 to SF08B 197-00	15.	Layout and Details - Piers W2, W3, W5 and W6
4.	SF08B 197-00 to S 286-00	16.	Layout and Details - Pier E4
5.	S 286-00 to S 315-00	17.	Layout and Details - Pier E11
6.	Miscellaneous Details I	18.	Layout and Details - Pier YB3
7.	Miscellaneous Details II		
8.	Traffic Stripes and Pavement Marking BECK JOINT DETAILS		
9.	L 44-00 to SF08B 106-75	19.	Timber Barricade
10.	SF08B 106-75 to SF08B 155-00	20.	Concrete Barrier Type 50
11.	SF08B 166-00 to SF08B 221-50	21.	Concrete Barrier Type 50
12.	SF08B 221-50 to SF08B 278-00		

MODIFICATIONS OF GRATING SUPPORTS

- Layout and Details - Pier W1 West
- Layout and Details - Piers W1 East, W4 and Y.B. Anchorage
- Layout and Details - Piers W2, W3, W5 and W6
- Layout and Details - Pier E4
- Layout and Details - Pier E11
- Layout and Details - Pier YB3

SPECIAL DETAILS

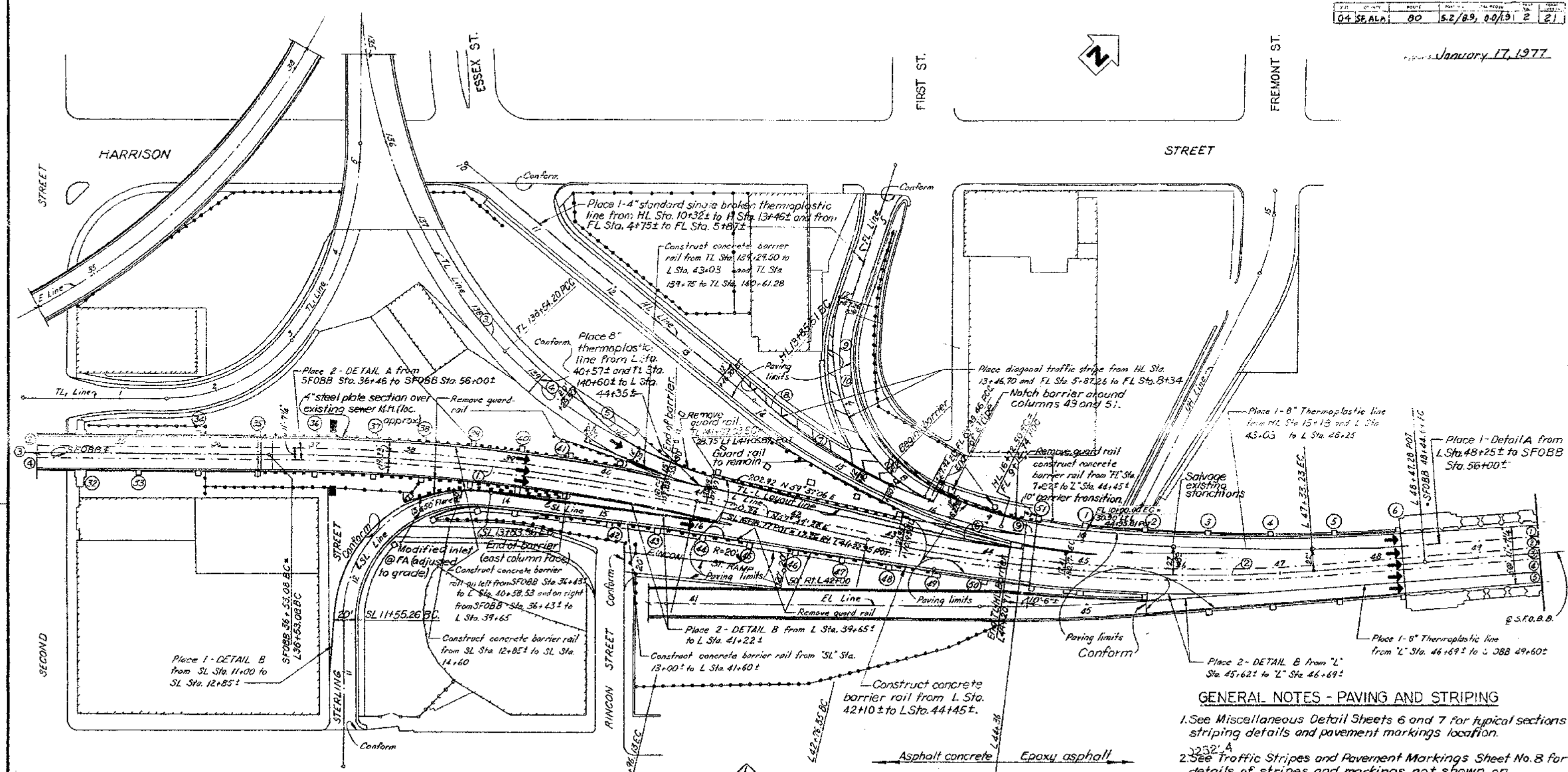
- Timber Barricade
- Concrete Barrier Type 50
- Concrete Barrier Type 50

CONTRACT NO. 04-025204  
DATE ACCEPTED  
**AS BUILT**  
RESIDENT ENGINEER E.W. COBLE  
REVISED BY C.E. CIELOHA DATE 5-79

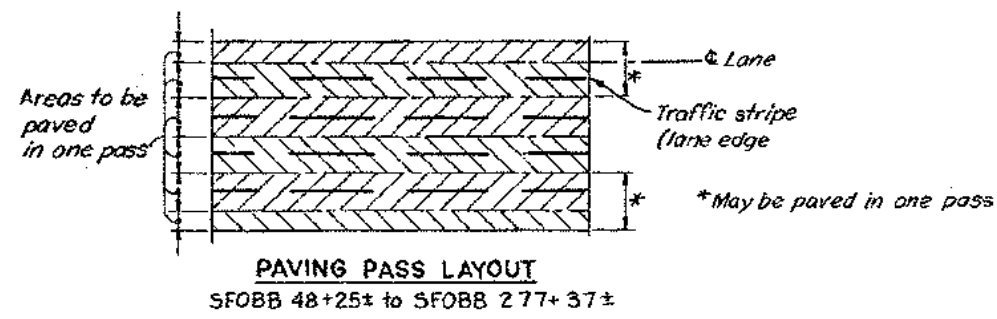
STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION		CONTRACT NO. 04-025204	
DESIGN BY <i>E. Larson</i>	APPROVED July 30, 1976	SAN FRANCISCO - OAKLAND BAY BRIDGE	
INVESTIGATIONS BY <i>John G. Lindberg Jr.</i>			
ESTIMATES BY <i>W. J. Quinn</i>			
APPROVAL RECOMMENDED			
MARK DATE	REVISION	BY	CHK.
	As built without revision	c/c	JK
SCALE 1" = 1160'		SHEET NO. 1	DRAWING NO. 04-025204-1R

84-873-025201

January 17, 1977



Mark	Line	R	Δ	L	T
1	L	2,000'	12°41'33"	143.05'	221.98'
2	L	1,500'	17°28'41"	457.57'	230.58'
3	TL	600'	41°11'39"	431.38'	225.49'
4	TL	425'	34°05'06"	252.83'	130.28'
5	TL(CA)	150'	36°59'08"	96.83'	50.17'
6	TL-L	1,000'	09°34'44"	167.11'	83.79'
7	HL	680'	24°10'53"	286.99'	145.66'
8	HL(CA)	500'	23°17'28"	203.25'	103.05'
9	FL	165'	82°28'17"	237.50'	144.63'
10	FL	462'	19°54'35"	160.54'	81.09'
11	FL(CA)	180'	78°27'49"	246.50'	146.97'
12	SL	134'	97°37'05"	228.30'	153.12'
13	FL(CA)	150'	28°03'47"	73.47'	37.49'



### GENERAL NOTES - PAVING AND STRIPING

- See Miscellaneous Detail Sheets 6 and 7 for typical sections striping details and pavement markings location.
- See Traffic Stripes and Pavement Markings Sheet No. 8 for details of stripes and markings not shown on sheets 6 and 7.
- See Special Details for Concrete Barrier Type 50

### LEGEND

- Chain link fence
- Guard rail

04-025204

BUILT  
E.W. COBLE  
C.F. CIELOHA

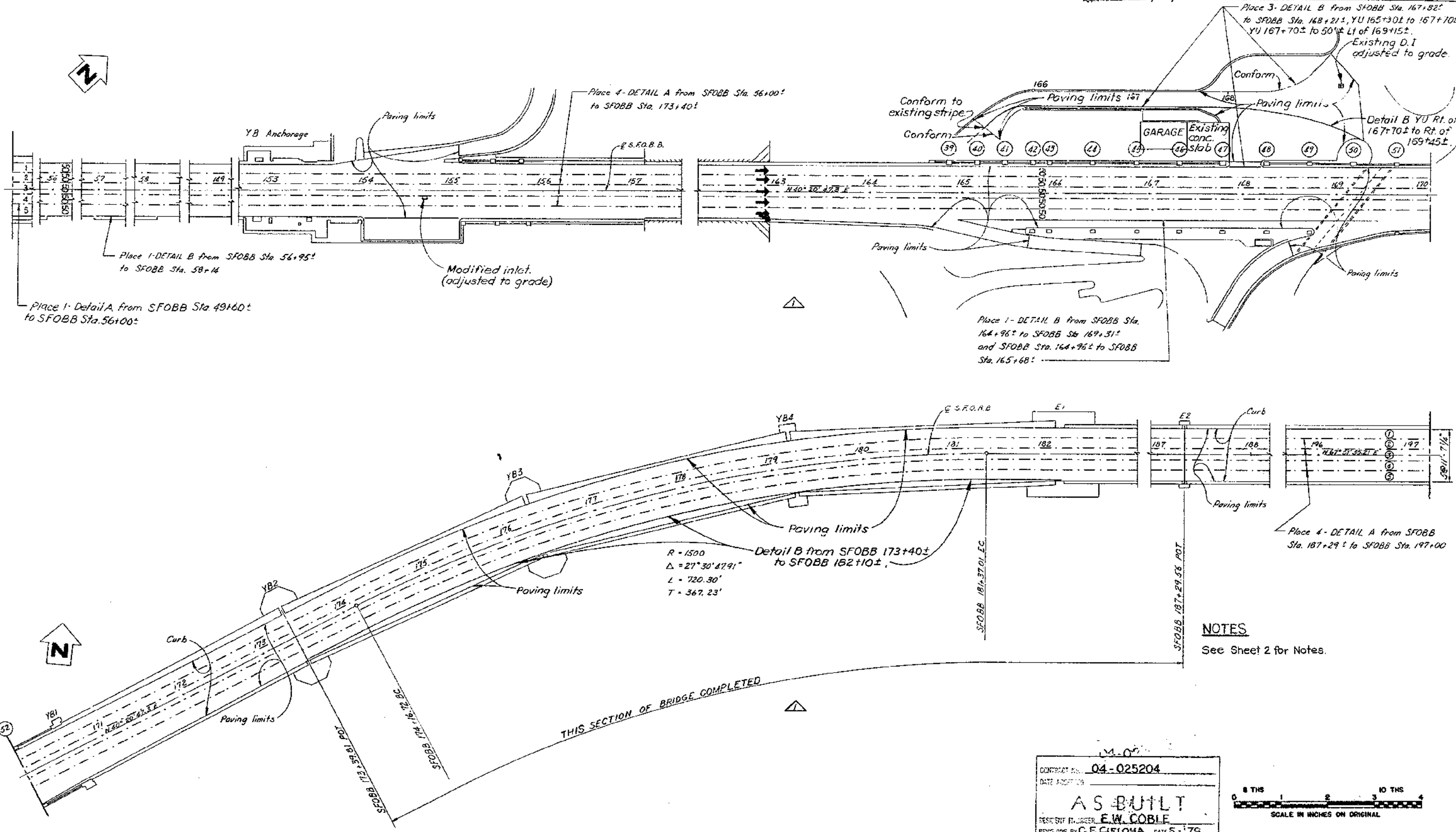


STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION	
DESIGN: <i>[Signature]</i>	APPROVED: JULY 30, 1976
CHECKED: <i>[Signature]</i>	REGISTERED: <i>[Signature]</i>
SAN FRANCISCO-OAKLAND BAY BRIDGE RESURFACING LOWER DECK PAVING AND STRIPING	
SFOBB 36+00 TO SFOBB 49+60	
SCALE: 1" = 50'	SHEET NO. 2
DRAWING NO. 04-025204-2R	

MARK	DATE	REVISION	BY	CHK.
5-75		As built with revision	cfc	

Approved January 17, 1977

04 SFALA 80 5.2/8.9, 0.0/1.9 3 21



**NOTES**  
See Sheet 2 for Notes.

CONTRACT NO. 04-025204  
DATE ADDED  
**AS BUILT**  
DESIGNED BY E.W. COBLE  
REVISIONS BY C.E. CIELONA DATE 5.1.79

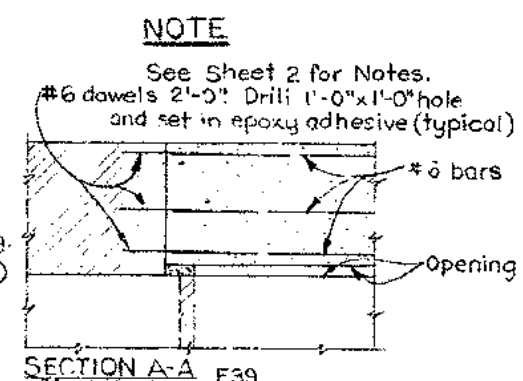
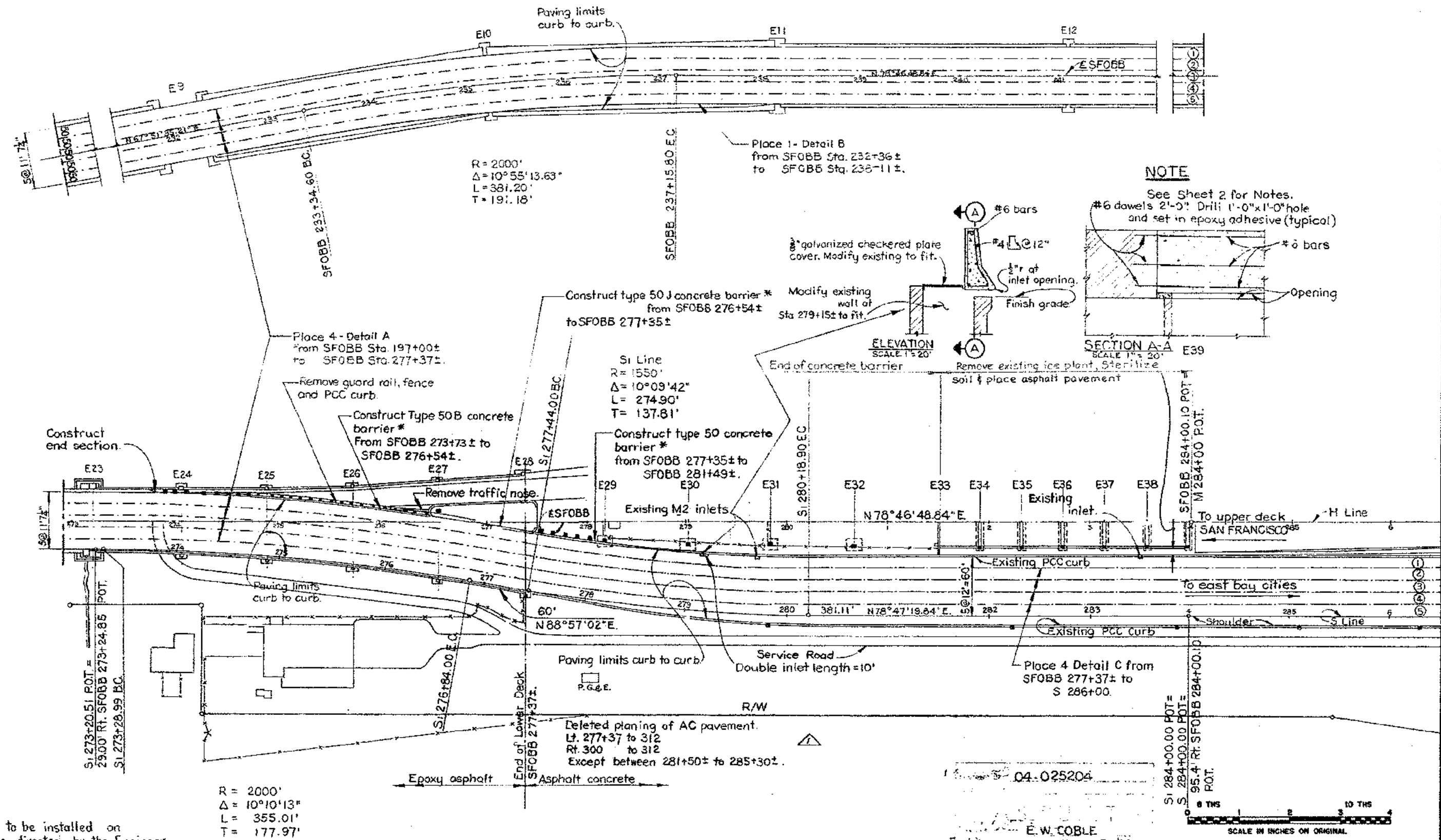


STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN	BY <i>[Signature]</i>	CHECKED	<i>[Signature]</i>
BRIDGE	BY C. F. CIELONA	CHECKED	<i>[Signature]</i>
SPECIFICATION	<i>[Signature]</i>	IN CHARGE OF DESIGN	<i>[Signature]</i>
APPROVED JULY 30, 1976		S. Larsen REGISTERED ENGR. C 12732	
SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING LOWER DECK PAVING AND STRIPING			
SFOBB 49+60 TO SFOBB 197+00			
SCALE	1" = 50'	SHEET NO.	3
		DRAWING NO. 04-025204-3R	

MARK	DATE	REVISION	BY	CHECKED
5-79		As built with revision	cfc	JR



January 17, 1977

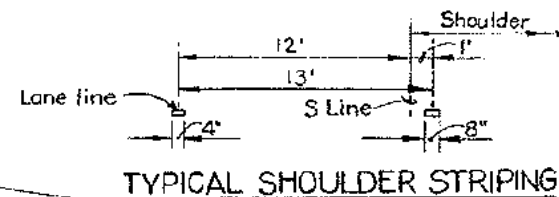
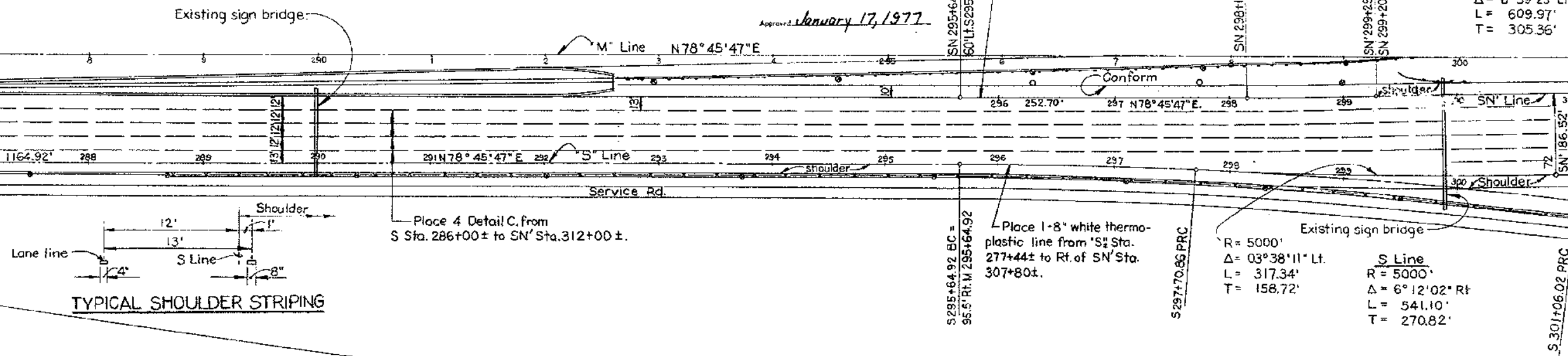


\* 265 LF Glare screen to be installed on concrete barrier where directed by the Engineer.

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN	BY <i>John L. ...</i>	CHK	
DRAWN	BY <i>C. F. ...</i>	CHK	
IN CHARGE OF DESIGN	BY <i>...</i>	CHK	
APPROVED: JULY 30, 1976		REGISTERED ENGR. C1232	
SAN FRANCISCO OAKLAND BAY BRIDGE RESURFACING LOWER DECK PAVING AND STRIPING			
SF0BB 197+00 TO S 286+00			
SCALE	1" = 50'	SHEET NO.	4
		DRAWING NO.	04-025204-4R

DATE	CHECKED	REVISION	POSTED	PROJECT	SHEET	TOTAL
04/25/74	ALA	80	5.2/8.9, 0.0/1.9	S	21	

Approved January 17, 1977



Place I Detail F from  
SN' Sta. 303+50± to  
SN' Sta. 304+90±

8" white thermoplastic  
strips

Place I - Detail D from  
SN' Sta. 304+90± to  
SN' Sta. 312+00±

Deleted planing of AC pavement  
Lt. 277+37 to 312  
Rt. 300 to 312  
Except between 281+50± to 285+30±

Existing sign bridge.

Conform to  
existing slopes.

Place I - Detail C from  
SN' Sta. 299+90± to  
SN' Sta. 312+00±.

S Line  
R = 5000'  
Δ = 06°12'02" LT  
L = 541.10'  
T = 270.82'

Place I - Detail E from  
SN' Sta. 307+80± to SN' Sta. 309+20±

Place I - Detail B  
from SN' Sta. 309+20± to SN' Sta. 312+00,  
and from SR 310± to SR 312+70±.

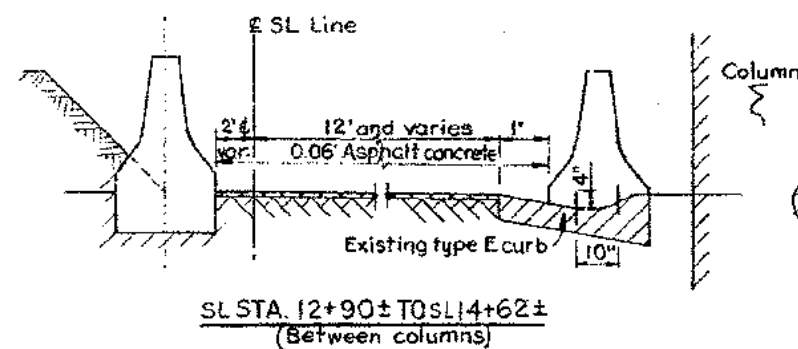
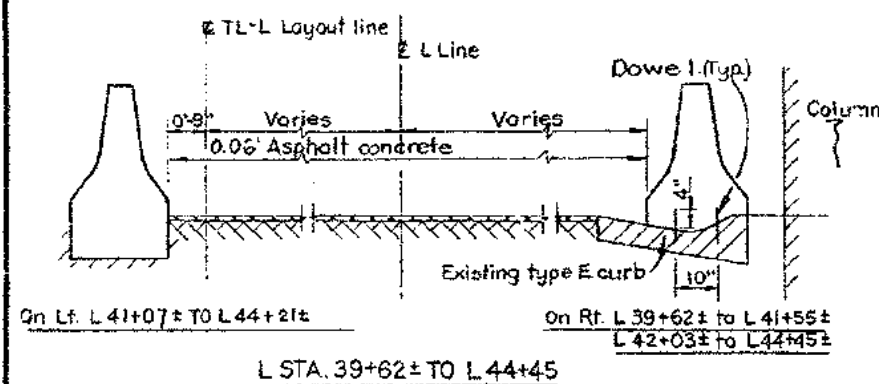
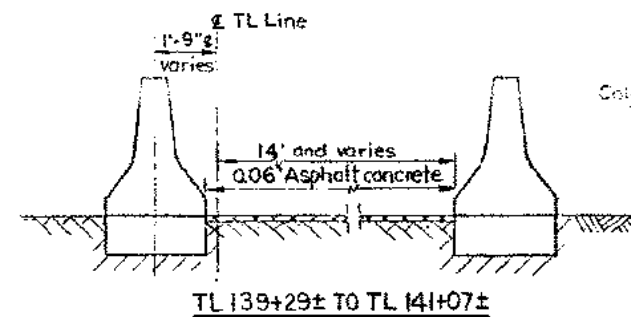
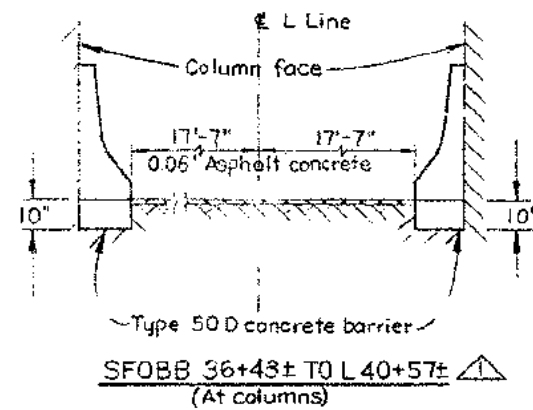
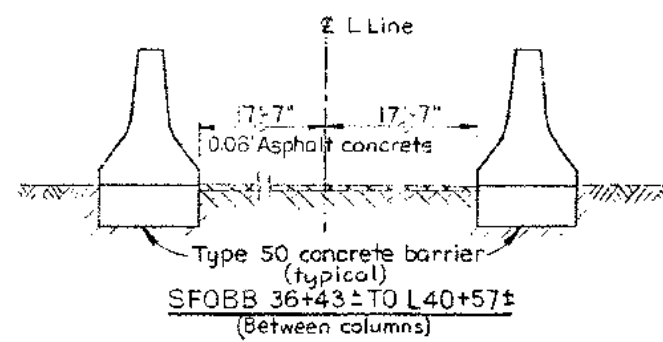
See Sheet 2 for Note.

04-025204  
BUILT  
E.W. COBLE  
C.F. CIELLOHA 5-79

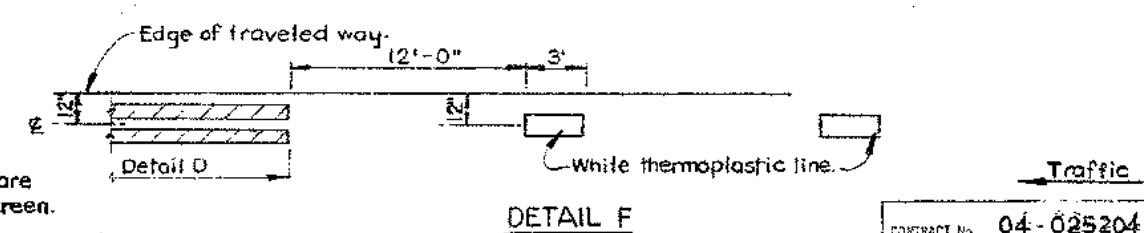
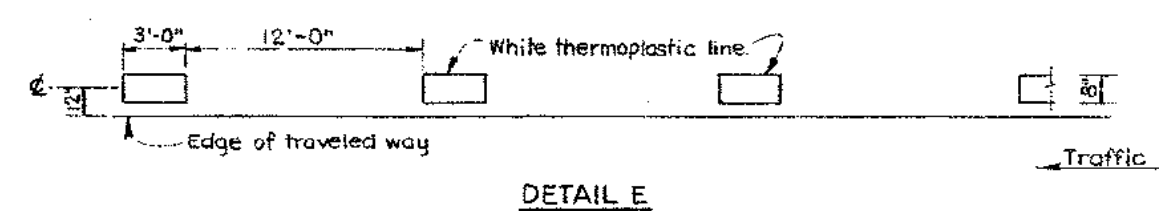
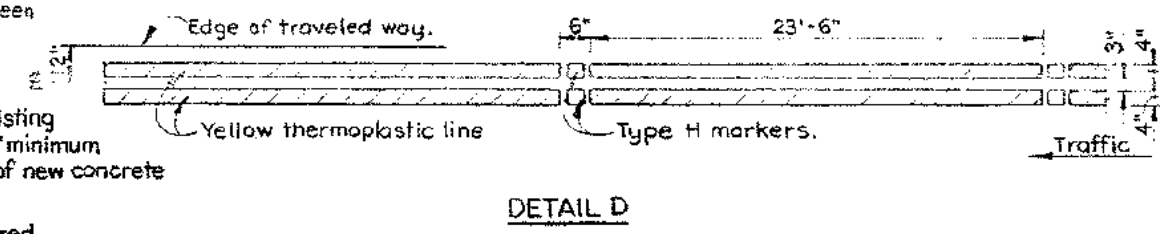
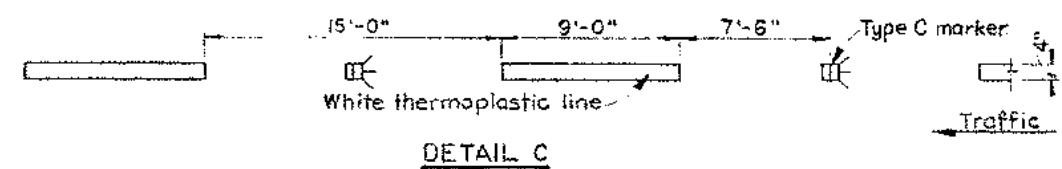
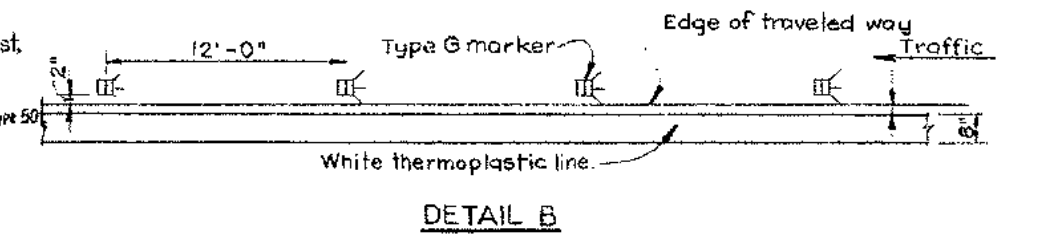
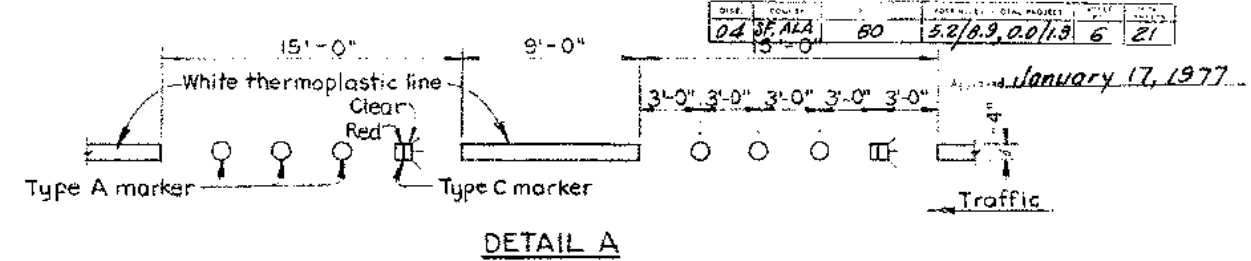
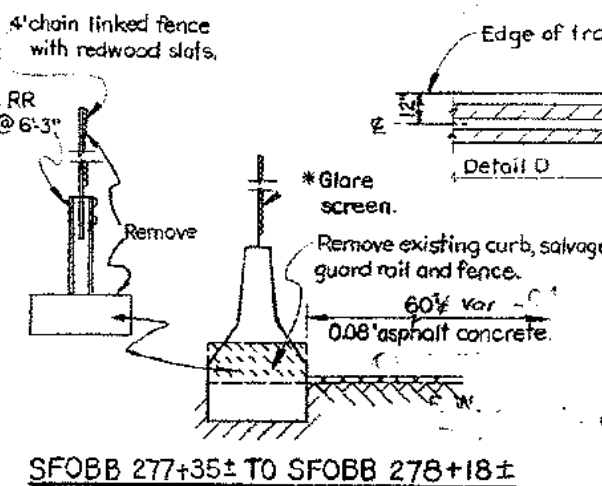
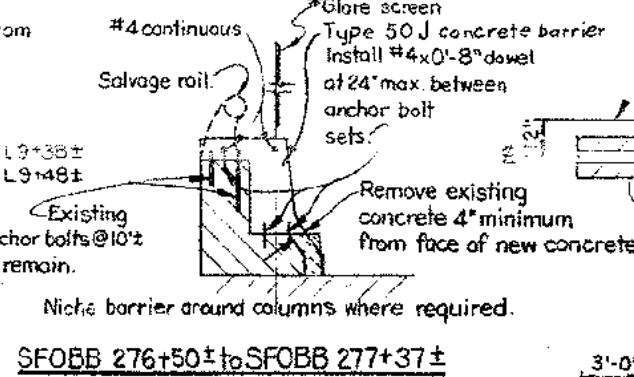
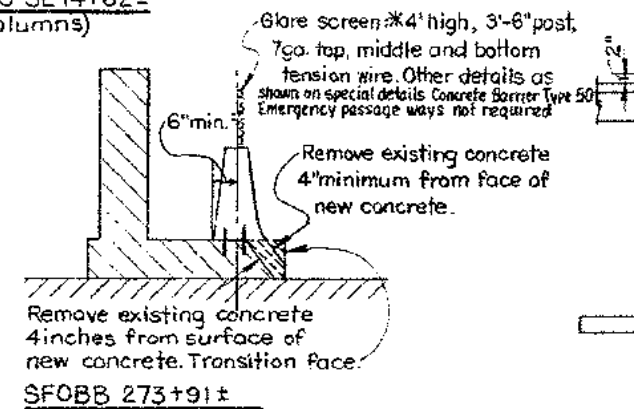
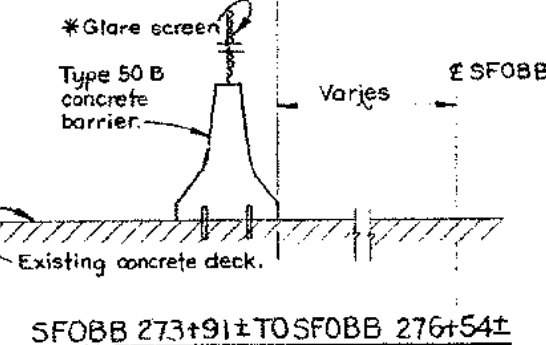
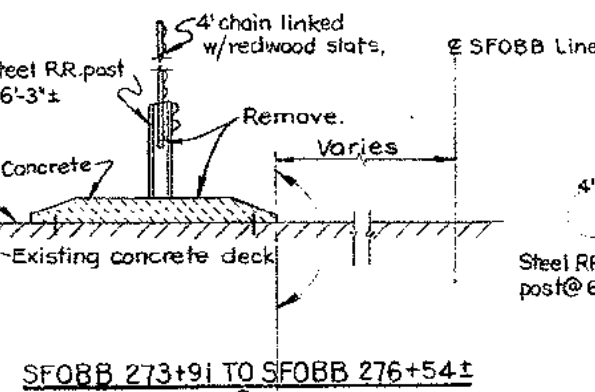
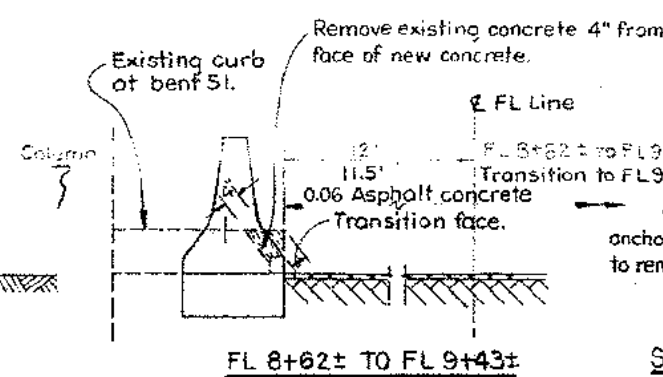
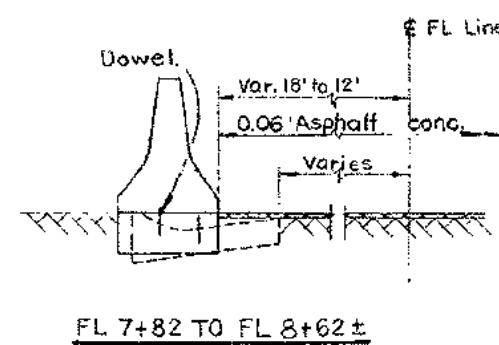
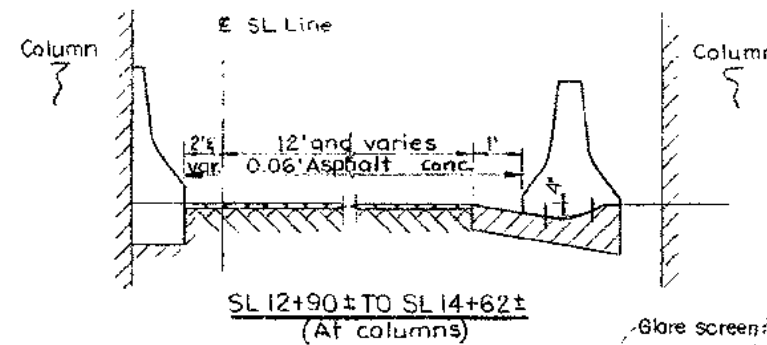


STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN	CHKD	DATE	BY
DRAWN	CHKD	DATE	BY
APPROVED JULY 30, 1976			
SAN FRANCISCO OAKLAND BAY BRIDGE RESURFACING LOWER DECK PAVING AND STRIPING			
S 286+00 TO S 315+00			
SCALE	1" = 50'	SHEET NO.	5
DRAWING NO.		04-025204-5R	

MARK	DATE	REVISION	BY	CHKD
5-79		As built with revision	cfc	JK



**TYPICAL SECTIONS**  
Scale: 1/2" = 1'-0"



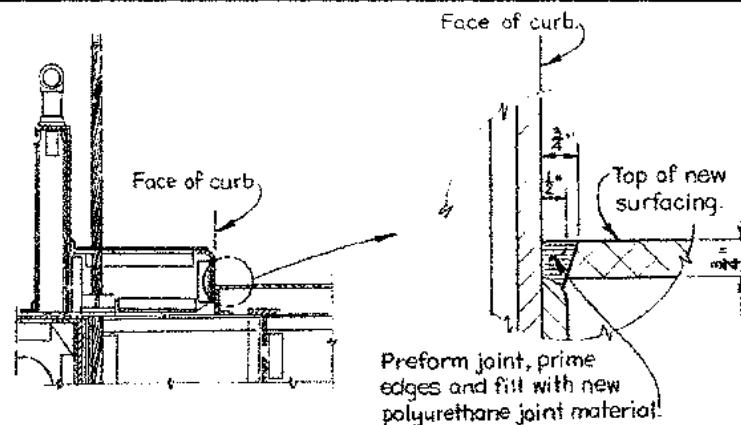
**STRIPING DETAILS**  
Scale: None

**NOTE**  
1. See Miscellaneous Details II, Sheet 7 for Notes.

CONTRACT NO. 04-025204  
DATE REVISION:  
AS BUILT  
E.W. COBLE  
REVISION BY C.F. CIELLOHA 5-79

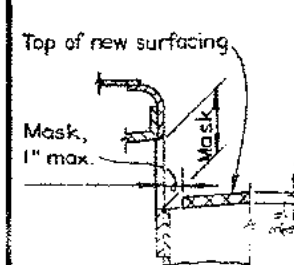
SCALE IN INCHES ON ORIGINAL

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN	BY	CHECKED	DATE
DRAWN	BY	CHECKED	DATE
IN CHARGE OF DESIGN	BY	CHECKED	DATE
APPROVED: JULY 30, 1976		SIGNED: [Signature]	
SAN FRANCISCO OAKLAND BAY BRIDGE		REVISION NO. 04-025204-6R	
RESURFACING LOWER DECK		DRAWING NO.	
PAVING AND STRIPING		SHEET NO. 6	
MISCELLANEOUS DETAILS I		SCALE: As Shown	



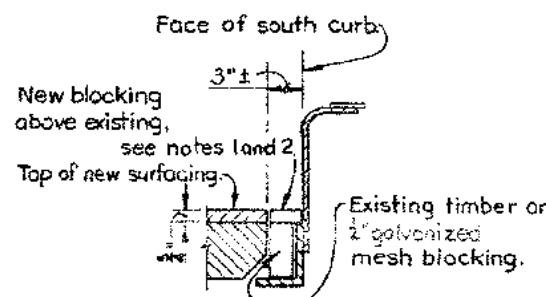
### NORTH CURB SEAL DETAIL

SF. Anchorage Sta. 49+63± to Y.B. Anchorage Sta. 152+70±  
Pier Y.B.I. Sta. 170+66±  
to Pier E 23 Sta 273+17±  
No Scale



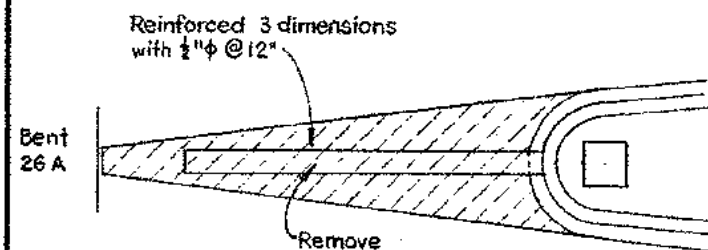
### NORTH CURB AT INLET

No Scale

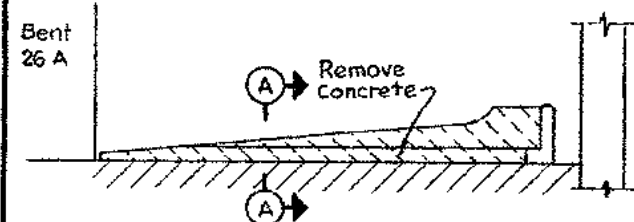


### SOUTH CURB BLOCKING DETAIL

No Scale



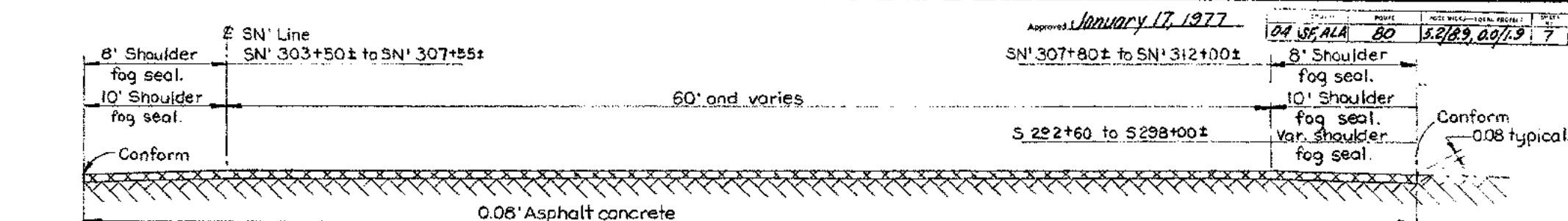
### PLAN



### ELEVATION

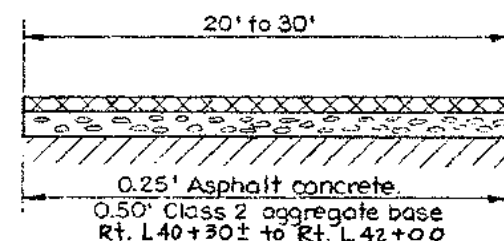
### REMOVAL OF TRAFFIC NOSE

Scale: 1/8" = 1'-0"



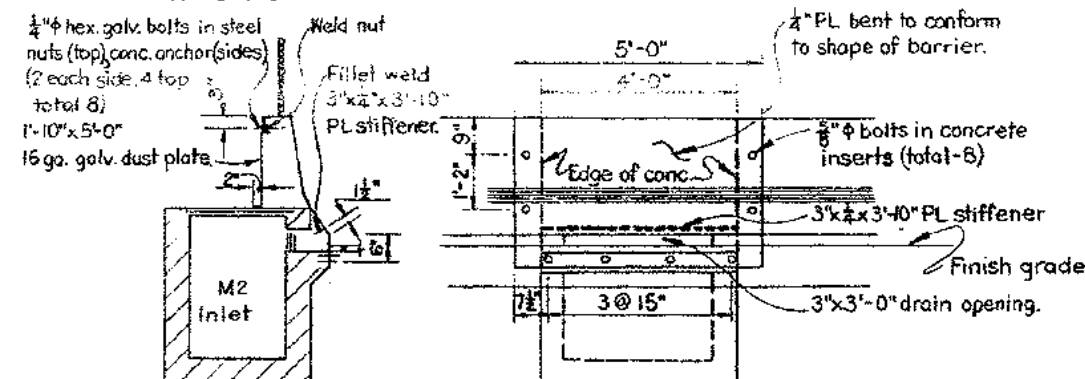
S 292+60 TO SN' 312+00

No Scale



### RINCON STREET RAMP

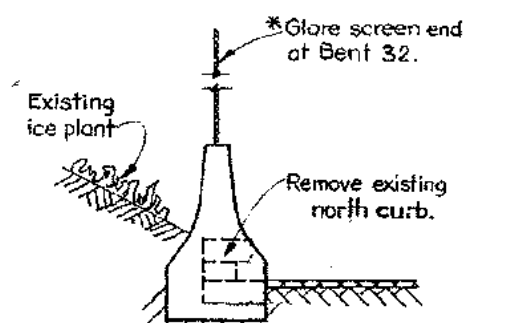
No Scale



### ELEVATION

### SFOBB 279+15 AND 279+70

Steel barrier at existing M2 inlets  
Scale: 1/2" = 1'-0"



### SFOBB 278+20± TO SFOBB 281+50

Scale: 1/2" = 1'-0"

### SECTION A-A

S 277+37± TO S 292+60±

No Scale

PAVEMENT MARKINGS LOCATION			
STATION	LANE NUMBERS		
	ARROWS		50
	A	E	
L 39+00	2,3,4		
TL 40+20	✓		
SL 15+70	✓		
L 48+00	1,2,3,4,5		
SFOBB 56+00			1,2,3,4,5
SFOBB 108+50			1,2,3,4,5
SFOBB 150+00	2,3,4,5	1	
SFOBB 163+00	1,2,3,4	5	
SFOBB 166+00			1,2,3,4,5
SFOBB 219+00			1,2,3,4,5
SFOBB 272+00			1,2,3,4,5

### NOTES

- Place timber blocking over existing from SFOBB Sta. 49+67± to 58+09± and from 58+41± to 62+95±
- Place galvanized 1/2" mesh blocking over existing from SFOBB Sta. 62+95± to 69+93±, 170+65± to 173+41± and from 187+30± to 187+90±
- Asphalt concrete overlay shall be open graded 3/4" maximum grading.
- Asphalt concrete overlay minimum thickness shall be:  
West approaches 0.06 feet  
East bay mole 0.08 feet
- Unless noted concrete barrier shall be Type 50.
- Refer to Special Details concrete Barrier Type 50 for details of concrete barrier.
- Where dowels are indicated they shall be #8 x 0'-8" at 24". Drill 1 1/2" hole and set in epoxy adhesive. Adhesive shall fill the hole before dowel is placed.
- Where new concrete is to be placed against old concrete surfaces, these areas shall be coated with epoxy.

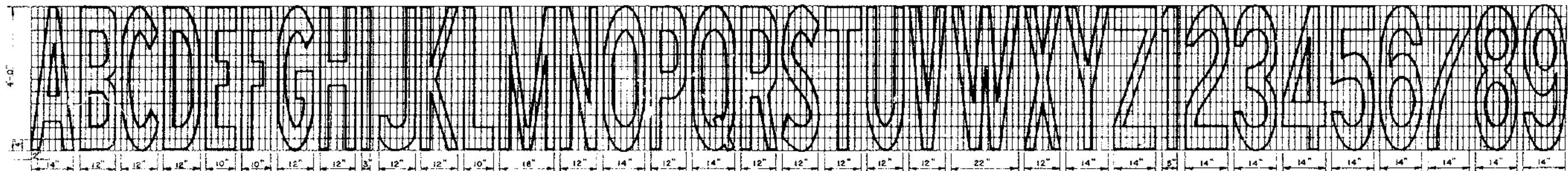


CONTRACT NO.	04-025204
DATE ACCEPTED	
<b>AS BUILT</b>	
RESIDENT ENGINEER	E. W. COBLE
REVISIONS BY	C.F. CIELLOHA DATE 5-1-79

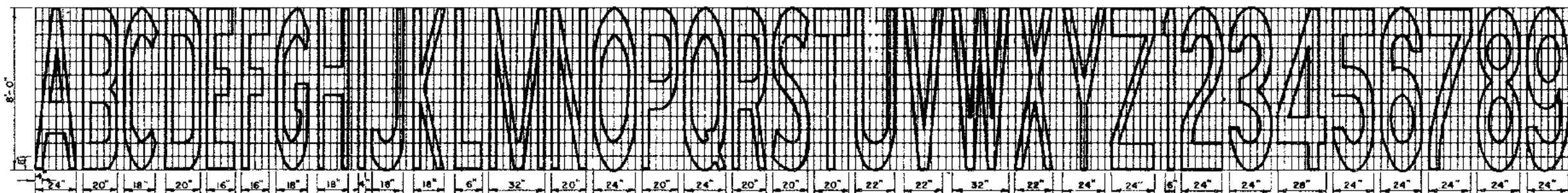
STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION —			
DESIGN	BY: <i>[Signature]</i>	CHECKED	<i>[Signature]</i>
DRAWN	BY: C.F. CIELLOHA	CHECKED	<i>[Signature]</i>
IN CHARGE OF DESIGN	<i>[Signature]</i>		
APPROVED		JULY 30, 1976	
SAN FRANCISCO OAKLAND BAY BRIDGE RESURFACING LOWER DECK PAVING AND STRIPING			
MISCELLANEOUS DETAILS II			
SCALE	As Shown	SHEET NO.	7
DRAWING NO.		04-025204-7R	

5-79	As built with revision	BY	C.F.
DATE	REVISION	BY	C.F.





4' PAVEMENT MARKINGS  
Scale 3/4" = 1'-0"



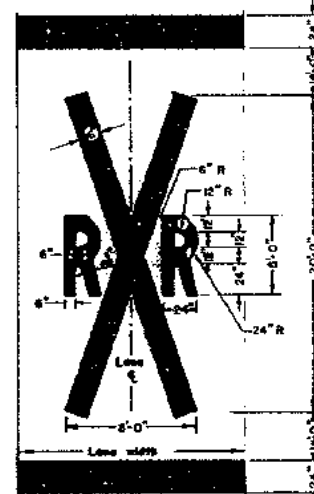
8' PAVEMENT MARKINGS  
Scale 3/8" = 1'-0"

To determine lateral spacing for 4' letter or numerals divide the spacing dimensions given in the table by 2.  
To determine the equivalent length, in linear feet of 4' continuous traffic stripe, for any given letter, numeral or arrow divide the area shown in the table by 48.

LATERAL SPACING AND AREAS OF PAVEMENT MARKINGS	
AREAS	LATERAL SPACING FOR 4' LETTERS OR NUMERALS (INCHES)
(Sq. ft.)	LETTERS OR NUMERALS ON RIGHT
A 302	908
B 415	1245
C 545	1717
D 688	2068
E 832	2432
F 975	2805
G 1117	3177
H 1259	3549
I 1401	3921
J 1543	4293
K 1685	4665
L 1827	5037
M 1969	5409
N 2111	5781
O 2253	6153
P 2395	6525
Q 2537	6897
R 2679	7269
S 2821	7641
T 2963	8013
U 3105	8385
V 3247	8757
W 3389	9129
X 3531	9501
Y 3673	9873
Z 3815	10245
0 3957	10617
1 4099	10989
2 4241	11361
3 4383	11733
4 4525	12105
5 4667	12477
6 4809	12849
7 4951	13221
8 5093	13593
9 5235	13965
PAVEMENT ARROWS	TYPE AREA (sq. in.)
A	3600
B	690
C	192
PAVEMENT ARROWS	TYPE AREA (sq. in.)
A	5904
B	6480
C	4946



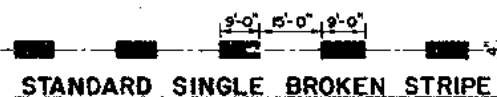
STOP BAR  
Scale: 3/16" = 1'-0"



RAILROAD MARKINGS

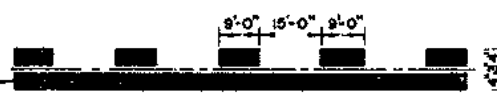
8" or 4" SHOULDER STRIPE

No Scale



STANDARD SINGLE BROKEN STRIPE

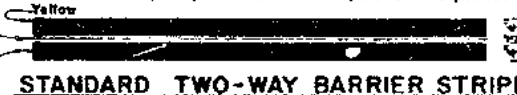
No Scale



STANDARD ONE-WAY BARRIER STRIPE

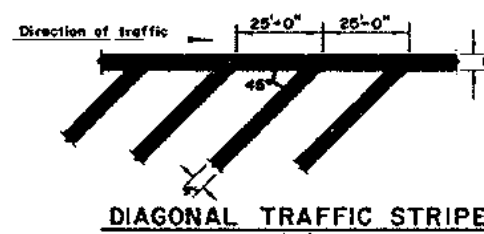
No Scale

Block - where barrier stripe is painted on concrete pavement - unpainted otherwise



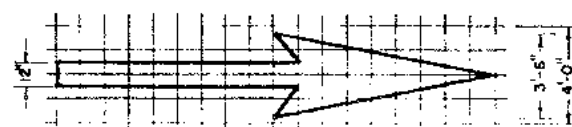
STANDARD TWO-WAY BARRIER STRIPE

No Scale

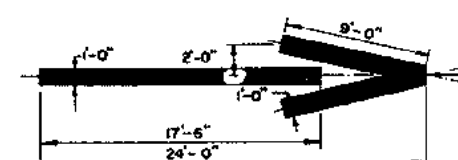


DIAGONAL TRAFFIC STRIPE

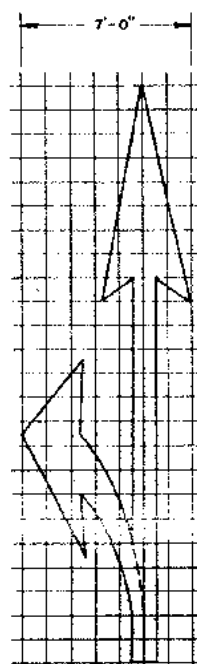
No Scale



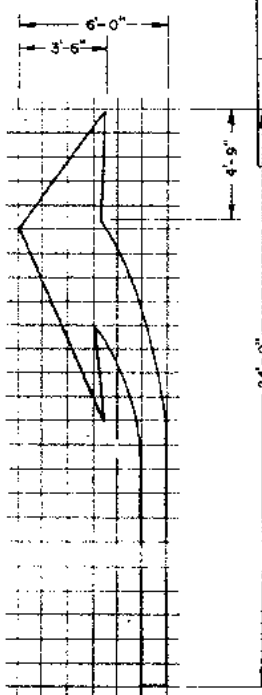
TYPE A  
Grid = 12"



TYPE F



TYPE E  
Grid = 12"



TYPE D  
Grid = 12"

# NOTES

➡ Addition to this standard sheet for this particular contract or work order

All traffic stripes and pavement markings are to be white unless specifically noted to be yellow on this sheet or unless noted otherwise on the Signing and Striping Layout sheets or on the Traffic Stage sheets

★ Use smallest dimension unless indicated otherwise on the Signing and Striping Layout sheets or on the Traffic Stage sheets

Where more than one word is used consecutively on the pavement the longitudinal spacing between the top of one word and the bottom of the next word shall be as follows - 50' for "SIGNAL AHEAD" and "STOP AHEAD", 15' for all other words using 8' letters; 4' for all words using 4' letters. These rules apply unless noted otherwise on the Signing and Striping Layout sheets or on the Traffic Stage sheets.

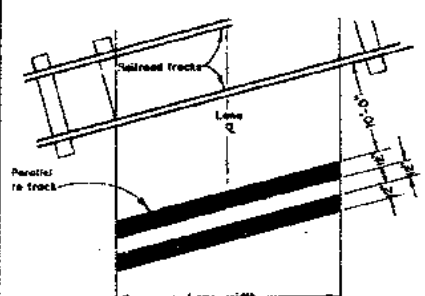
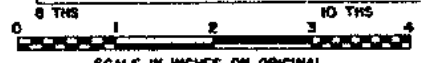
CONTRACT No. 04-025204

DATE ACCEPTED

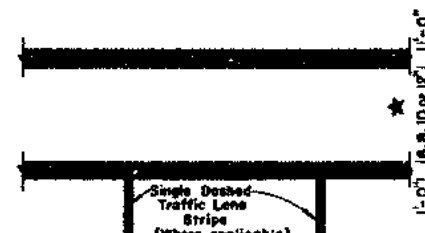
AS BUILT

RESIDENT ENGINEER E.W. COBLE

REVISIONS BY C.F. CLELOHA DATE 5-79



RAILROAD STOP BAR



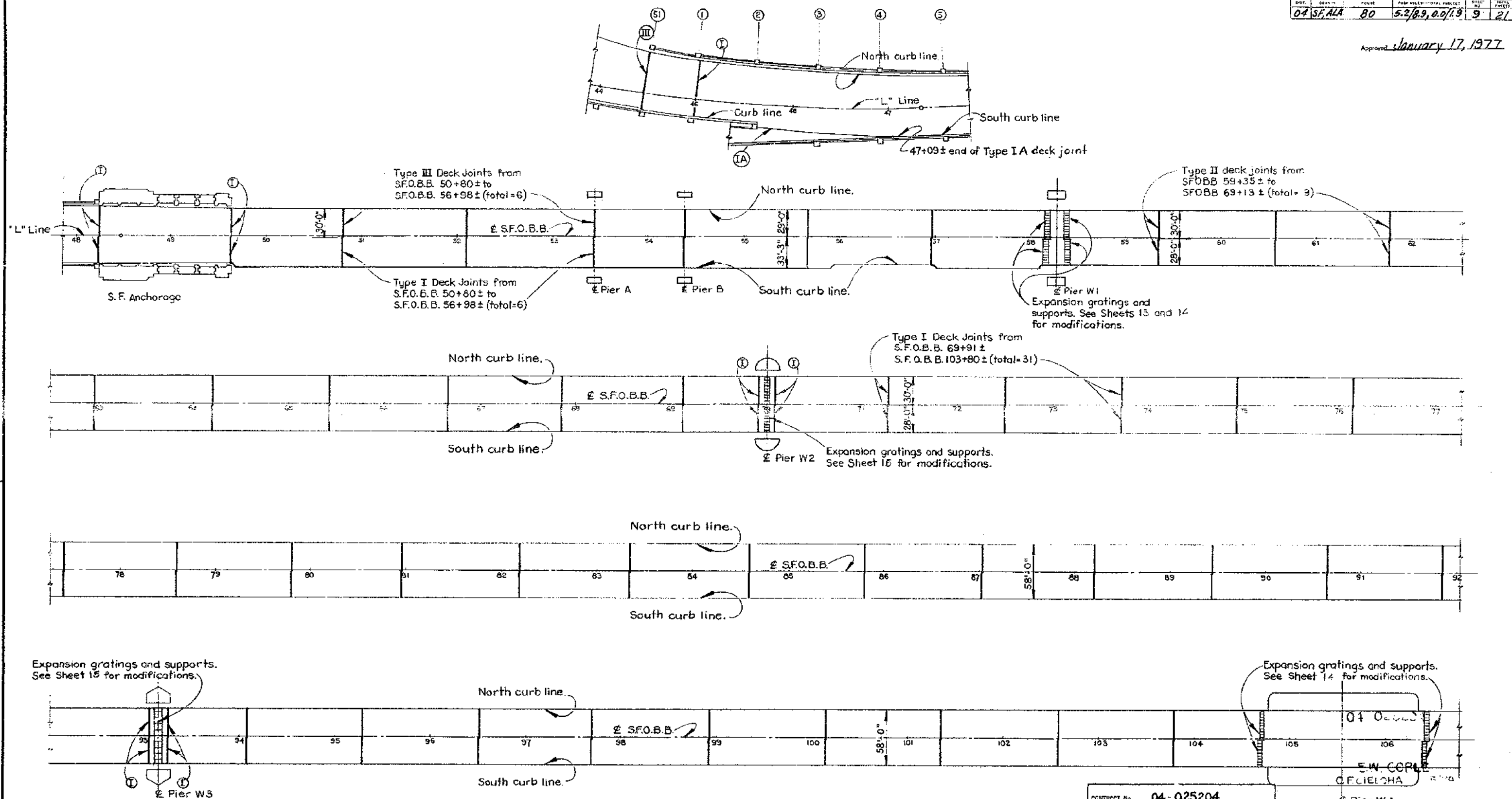
PEDESTRIAN CROSSING

Scale 3/16" = 1'-0"

STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY		APPROVED JULY 30, 1976		SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING LOWER DECK PAVING AND STRIPING	
DESIGN BY <i>E. W. Coble</i>	CHECKED BY <i>E. W. Coble</i>	APPROVED <i>S. Larsen</i>		TRAFFIC STRIPES AND PAVEMENT MARKINGS	
DRAWN BY <i>C. F. Cleloha</i>	CHECKED BY <i>C. F. Cleloha</i>	REGISTERED ENG. 015183		SCALE As	SHEET NO. 8
IN CHARGE OF DESIGN <i>C. F. Cleloha</i>		REGISTERED ENG. 015183		DRAWING NO. 04-025204-BR	

MARK	DATE	REVISION	BY	CHK.
5-79	As built without revision		cfc	JL

Approved January 17, 1977



Expansion gratings and supports. See Sheet 15 for modifications.

Expansion gratings and supports. See Sheet 14 for modifications.

# NOTES

1. For horizontal alignment of roadway, see Sheets 2, 3, 4 and 5

2. For details of deck joint types, see Sheet 10

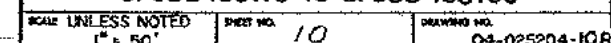
- ① Type I deck joint.
- ② Type II deck joint.
- ③ Type III deck joint.

CONTRACT No. 04-025204  
DATE ACCEPTED  
**AS BUILT**  
RESIDENT ENGINEER E. W. COBLE  
REVISIONS BY C.F. CIELOHA DATE 5-79

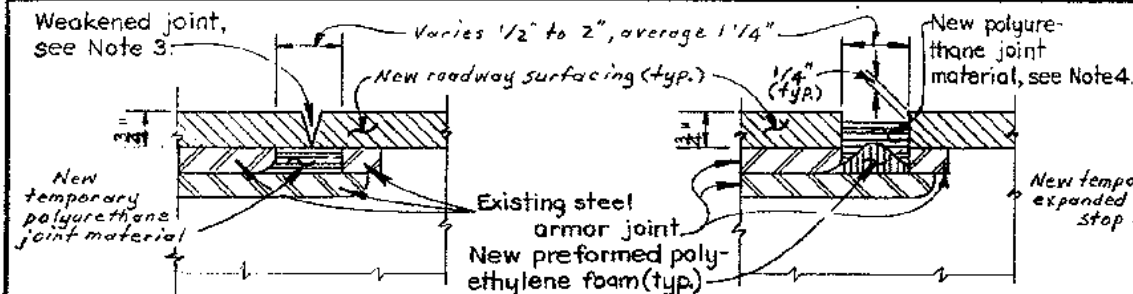
8 THS 10 THS  
SCALE IN INCHES ON ORIGINAL

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN BY W.H. Jorg	CHECKED BY C.F. CIELOHA	DATE 02/27/79	REVISIONS BY C.F. CIELOHA DATE 5-79
APPROVED JULY 30, 1976		S. Larson	
SAN FRANCISCO-OAKLAND BAY BRIDGE RESURFACING LOWER DECK DECK JOINT DETAILS L 44+00 TO SFOBB 106+75			
SCALE UNLESS NOTED 1" = 50'	SHEET NO. 9	DRAWING NO. 04-025204-9 R	

DATE	REVISION	BY	CHK
5-79	As built without revision	cfc	JL



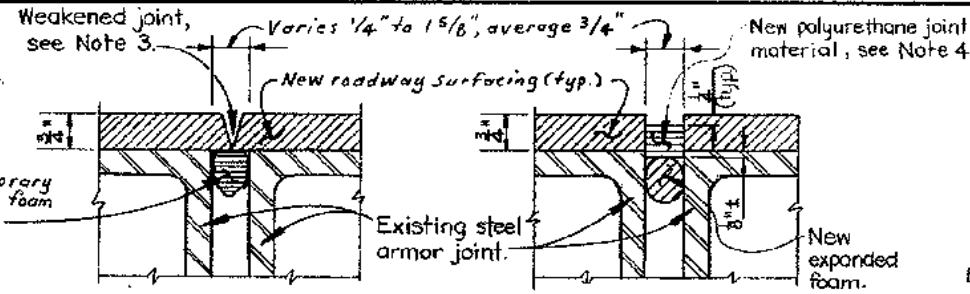
Weakened joint, see Note 3.



STAGE I

STAGE II - FINISHED

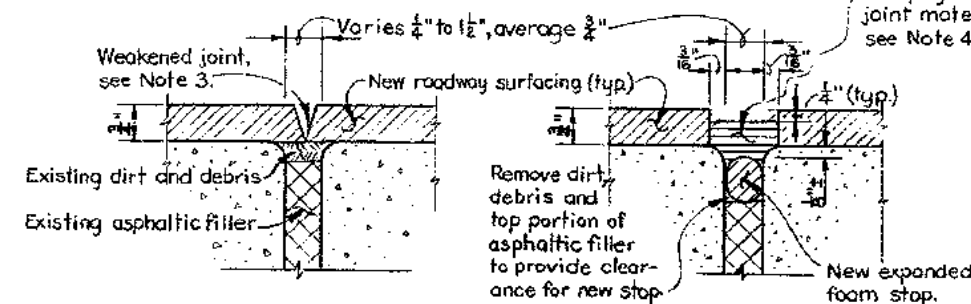
TYPE II JOINT DETAIL  
Scale: None



STAGE I

STAGE II - FINISHED

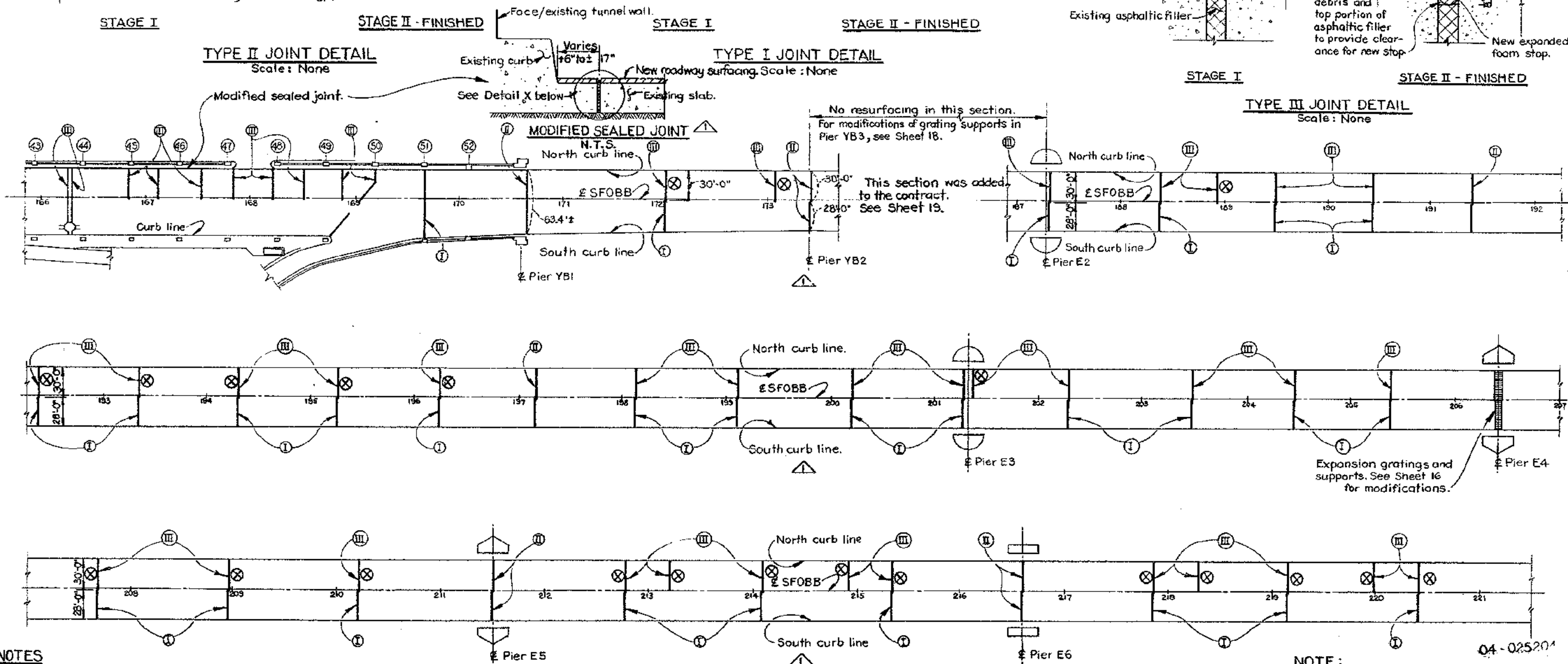
TYPE I JOINT DETAIL  
Scale: None



STAGE I

STAGE II - FINISHED

TYPE III JOINT DETAIL  
Scale: None



# NOTES

- For horizontal alignment of roadway, see Sheets 2, 3, 4 and 5
- For details of deck joint types, see Sheet 10

- ① Type IA deck joint
- ② Type I deck joint
- ③ Type II deck joint
- ④ Type III deck joint

- Stage I for Type I, Type II and Type III joints:

A weakened joint shall be provided at all deck joints. The pavement shall be cut through to allow for movement while the pavement is curing. This weakened joint shall be made after the epoxy asphalt pavement has been placed and before the lane is opened to traffic.

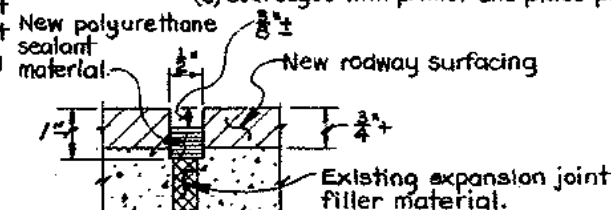
- Stage II for Type I, Type II and Type III joints:

Sequence of sealing joints:

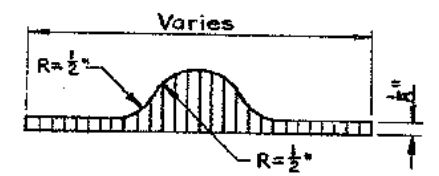
- Saw cut edges of epoxy asphalt pavement after pavement has cured for 30 days.

- Continued.

- For Type I joint: Remove excess and temporary material. For Type II joint: Remove excess material and temporary stop. For Type III joint: Remove dirt, debris and top portion of asphaltic filler. Clean joint and place stop.
- Coat edges with primer and place polyurethane seal.



DETAIL X  
N.T.S.



PREFORMED POLYETHYLENE FOAM  
Full Scale

## NOTE:

- ⊗ These deck joint seals were not modified on this contract.

E.W. COBLE  
C.E. CLELOHA

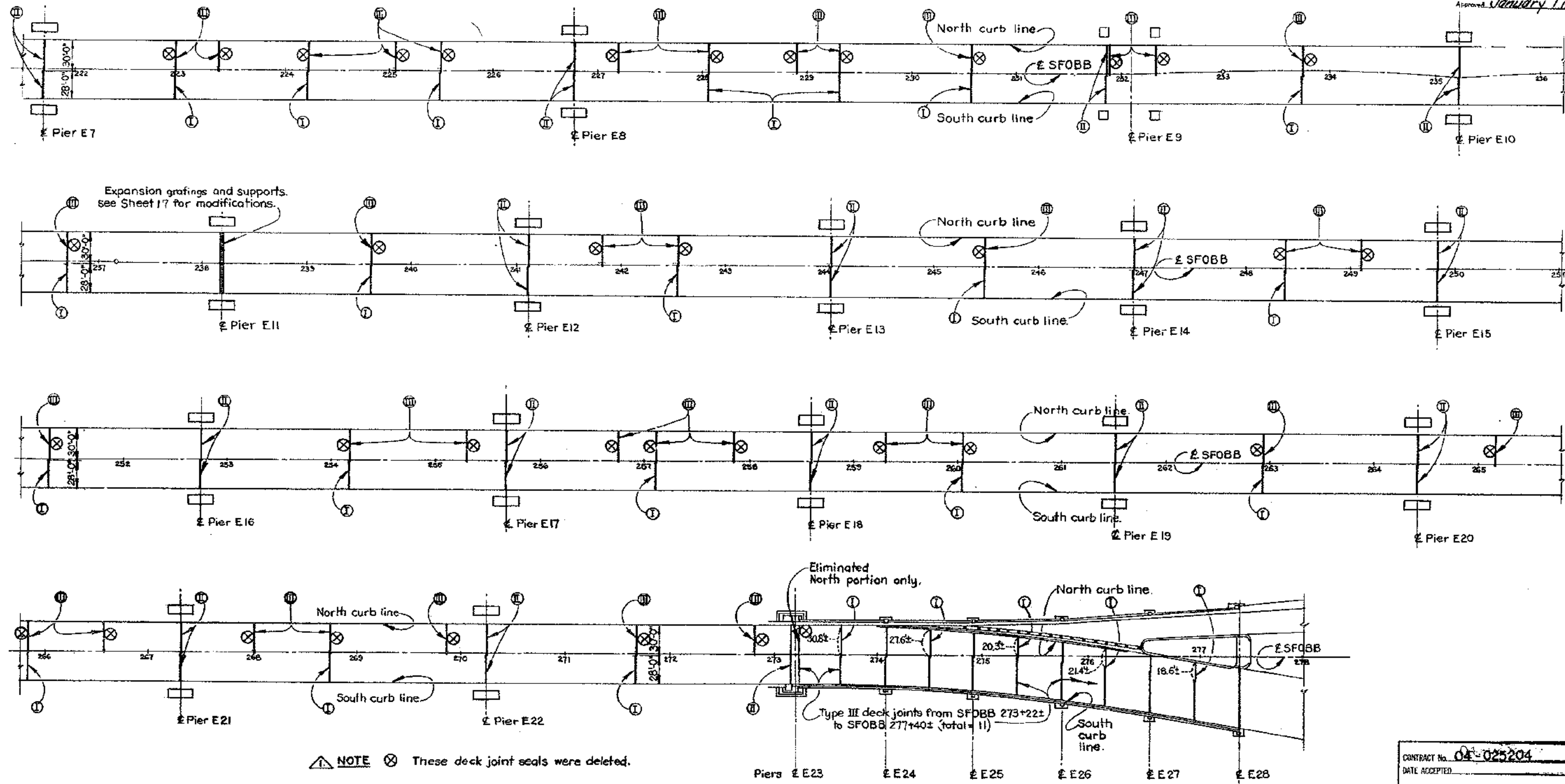


SCALE IN INCHES ON ORIGINAL

CONTRACT No. 04-025204	
DATE ACCEPTED	
<b>AS BUILT</b>	
RESIDENT ENGINEER E.W. COBLE	
REVISIONS BY C.E. CLELOHA, MILE 5-179	

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN BY W.H. Jorgensen	CHECKED BY C.E. CLELOHA	DATE JULY 30, 1976	<p><b>SAN FRANCISCO - OAKLAND BAY BRIDGE</b> RESURFACING LOWER DECK DECK JOINT DETAILS</p> <p>SFOBB 166+00 TO SFOBB 221+50</p> <p>SCALE UNLESS NOTED 1" = 50'</p>
BY CHARGE OF DESIGNER	REVISIONS BY C.E. CLELOHA, MILE 5-179	APPROVED JULY 30, 1976	
<p>5-79 As built with revision</p> <p>DATE</p>			<p>04-025204-11 R</p>

Approved January 17, 1977



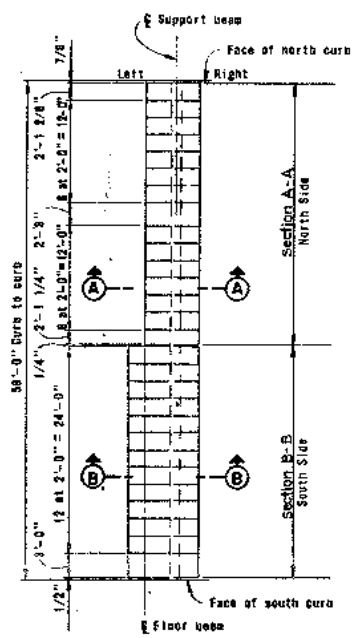
- NOTES**
- For horizontal alignment of roadway, see Sheets 2, 3, 4 and 5
  - For details of deck joint types, see Sheet 10
    - Type I deck joint.
    - Type II deck joint.
    - Type III deck joint.

CONTRACT No. 04-025204  
 DATE ACCEPTED  
**AS BUILT**  
 RESURFACING ENGINEER: F.W. DOBLE  
 REVIEWED BY: C.F. CIELLOHA, MAY 5, 1979

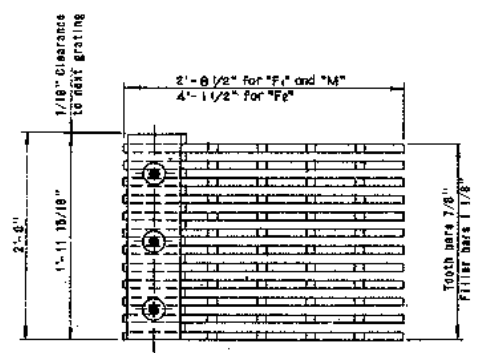


STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION							
DESIGNED BY: W.H. JONES	CHECKED BY: C.F. CIELLOHA	DATE: 7/30/76	APPROVED: JULY 30, 1976 S. Larsen				
IN CHARGE OF DESIGN: W.H. JONES	DATE: 7/30/76	DATE: 7/30/76					
SAN FRANCISCO-OAKLAND BAY BRIDGE RESURFACING LOWER DECK DECK JOINT DETAILS SF0BB 221+50 TO SF0BB 278+00							
MARK	DATE	REVISION	BY	CHECKED	SCALE: UNLESS NOTED 1" = 50'	SHEET NO. 12	DRAWING NO. 04-025204-12R

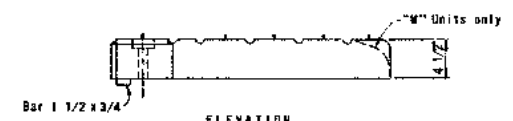




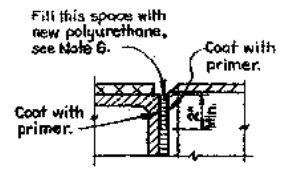
**GRATING LAYOUT**  
 No Scale



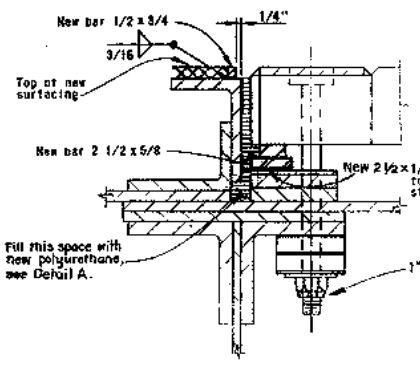
**PLAN**  
 (Except as shown on GRATING LAYOUT)



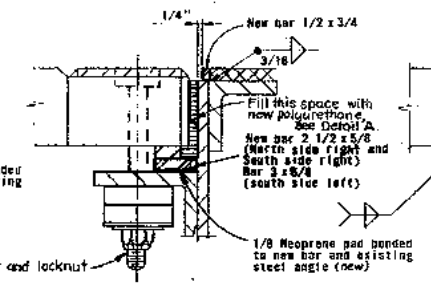
**ELEVATION**  
 TYPICAL GRATING UNIT



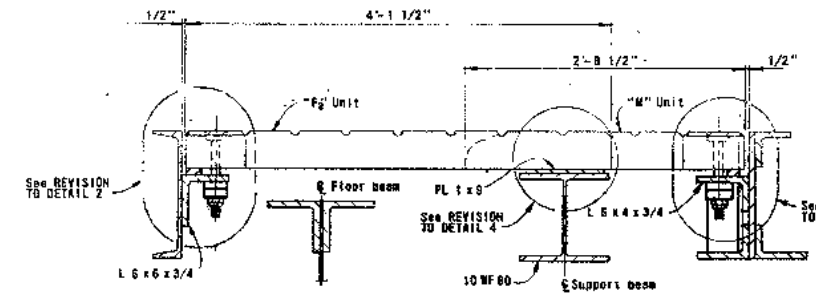
**DETAIL A**  
 No Scale



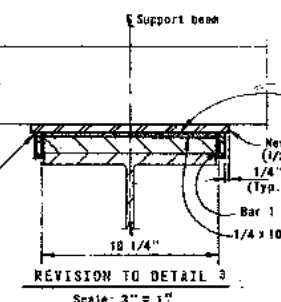
**REVISION TO DETAIL 1**  
 Scale: 3" = 1'-0"



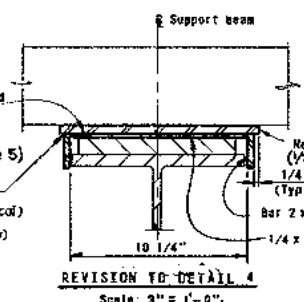
**REVISION TO DETAIL 2**  
 (North Side, right shown - South Side, right similar - South Side, left opposite hand)  
 Scale: 3" = 1'-0"



**SECTION B-B**  
 (South Side)



**REVISION TO DETAIL 3**  
 Scale: 3" = 1'-0"



**REVISION TO DETAIL 4**  
 Scale: 3" = 1'-0"

**GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS**

1. "F", "F1" and "F2" indicate fixed grating units and "M" indicates movable grating unit.
2. PLAN, ELEVATION or DETAILS show existing conditions except as noted on REVISION DETAILS by the word new.
3. All views show existing conditions unless noted by REVISION TO DETAILS which show the required modifications.
4. Grating units and wear plates shall be modified in sections of approximately one lane width.
5. The top surface of grating units (the finger bars) shall be raised to a plane formed by a straight line between the top surfaces of adjacent pavement bar stops with a maximum of one-eighth inch (1/8") variation from the bottom of a straight edge placed across the pavement slope. The thickness of new steel plates shall be determined by field measurements prior to shop fabrication.
6. The top 2" minimum shall be prime coated prior to placing polyurethane.

CONTRACT NO. 04-025204  
 DATE ACCEPTED  
**AS BUILT**  
 RESPECT ENGINEER: E.W. COBLE  
 REVISIONS BY: C.F. CIELLOHA DATE 5-79



STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION

DESIGNED BY: J.R. Jones	CHECKED BY: J.R. Jones	DATE: 7/30/76
DRAWN BY: J.R. Jones	CHECKED BY: J.R. Jones	DATE: 7/30/76
APPROVED BY: J.R. Jones	CHECKED BY: J.R. Jones	DATE: 7/30/76

APPROVED JULY 30, 1976

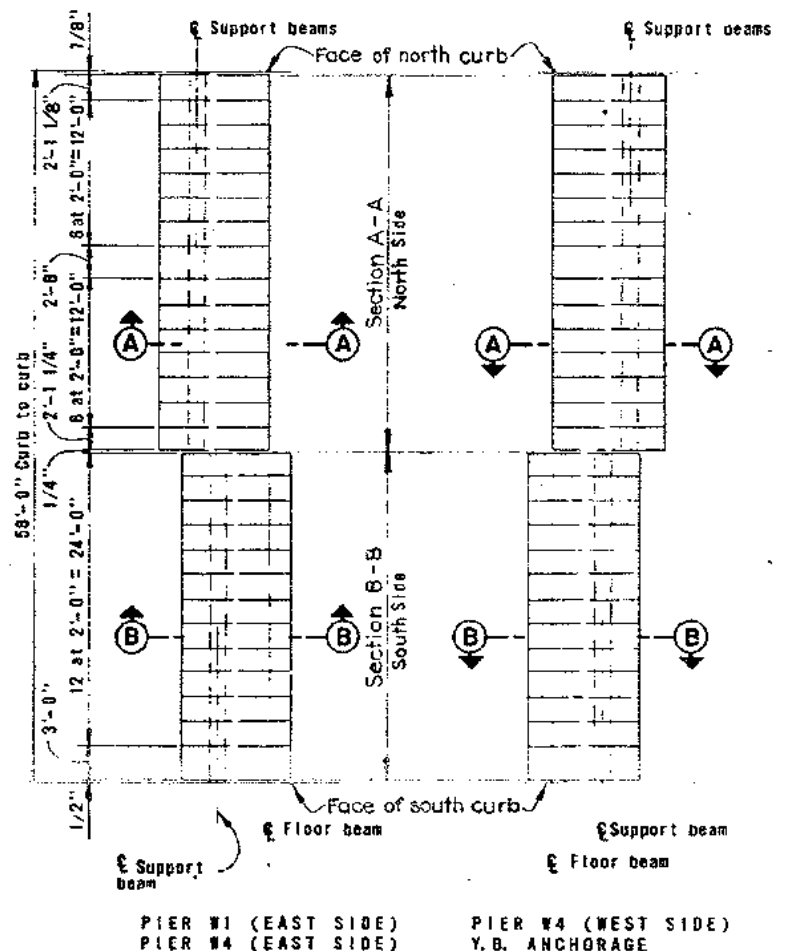
SAN FRANCISCO - OAKLAND BAY BRIDGE  
 RESURFACING LOWER DECK  
 MODIFICATIONS OF GRATING SUPPORTS  
 LAYOUT AND DETAILS - PIER #1 WEST

SCALE UNLESS NOTED  
 1 1/2" = 1'-0"

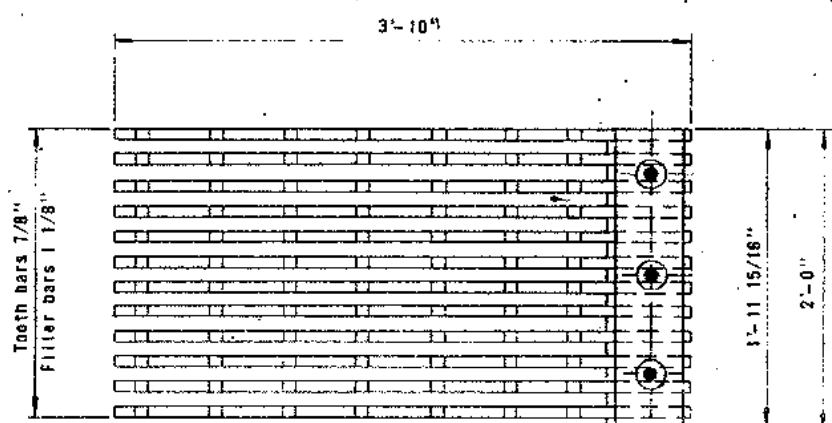
PROJECT NO. 13  
 DRAWING NO. 04-025204-13R

5-79 As built without revision	cfc	JR
DATE	REVISION	BY

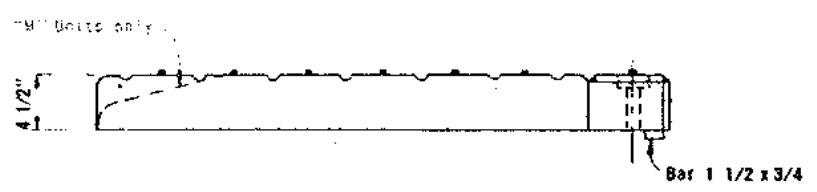
Approved January 17, 1977



GRATING LAYOUT  
No Scale

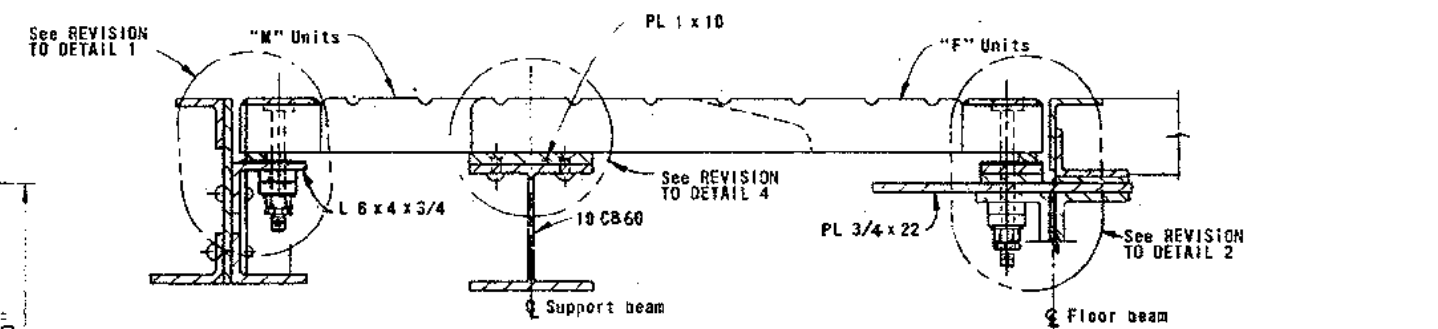


PLAN  
(Except as shown on GRATING LAYOUT)

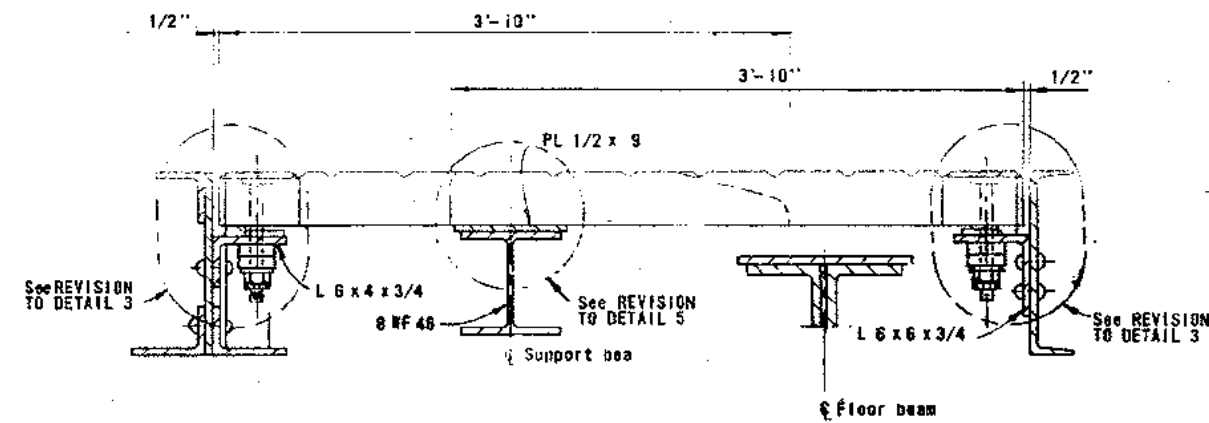


ELEVATION

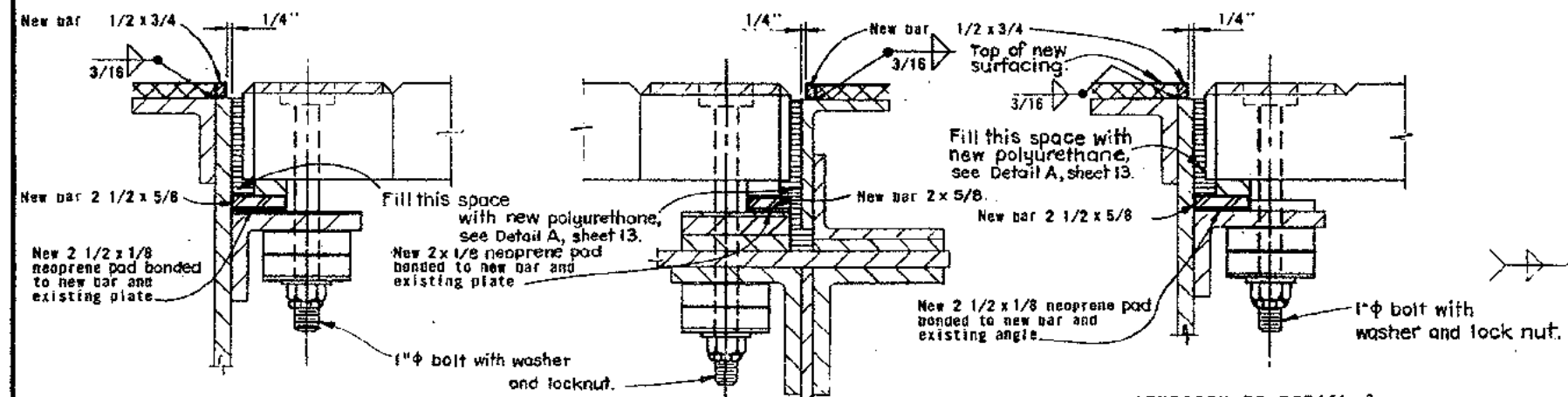
TYPICAL GRATING UNIT



SECTION A-A  
(North Side)



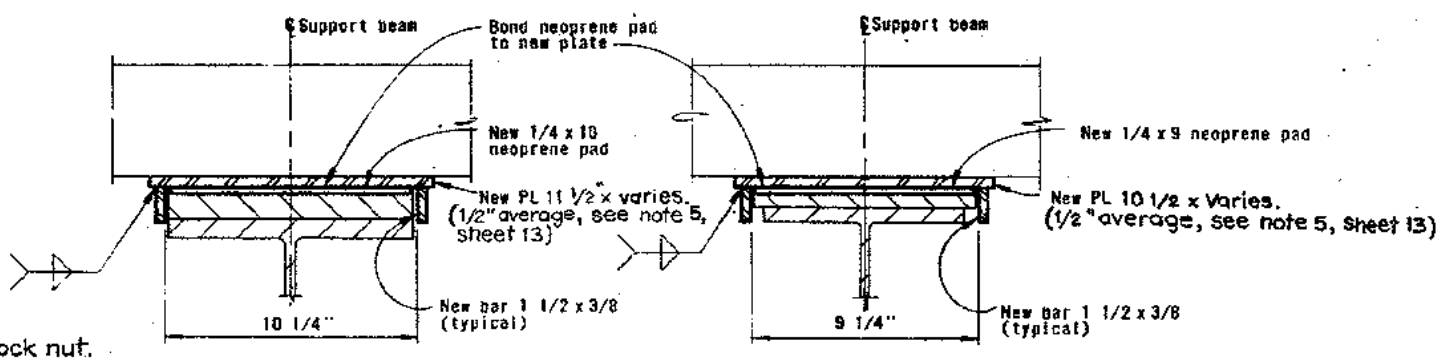
SECTION B-B  
(South Side)



REVISION TO DETAIL 1  
Scale: 3" = 1'-0"

REVISION TO DETAIL 2  
Scale: 3" = 1'-0"

REVISION TO DETAIL 3  
(Left shown - Right opposite hand)  
Scale: 3" = 1'-0"



REVISION TO DETAIL 4  
Scale: 3" = 1'-0"

REVISION TO DETAIL 5  
Scale: 3" = 1'-0"

CONTRACT No. 04-025204  
DATE ACCEPTED  
**AS BUILT**  
RESIDENT ENGINEER E.W. COBLE  
REVISIONS BY C.F. CIELONA DATE 5-79

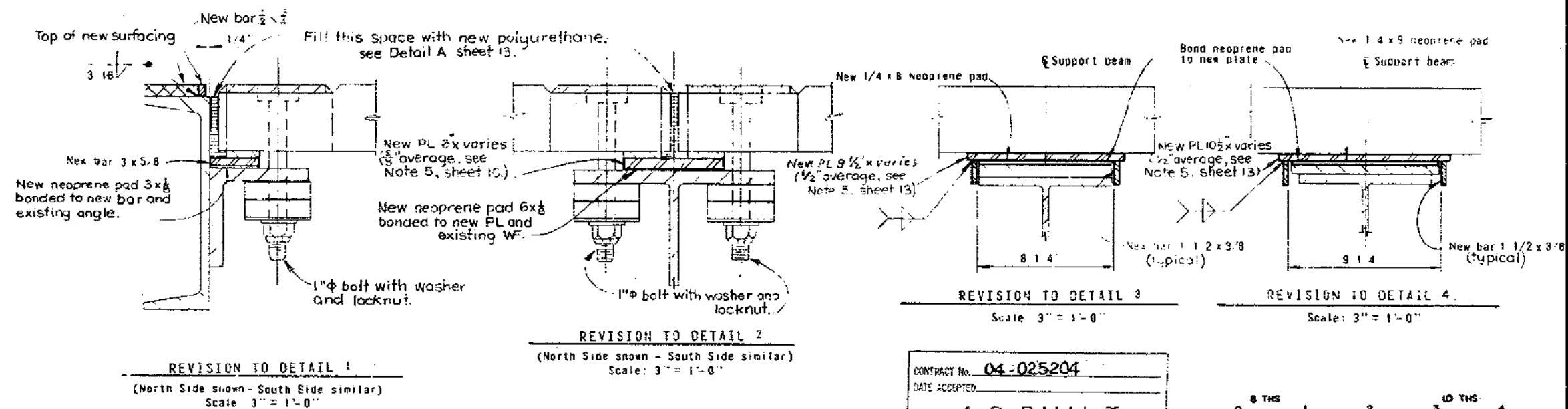
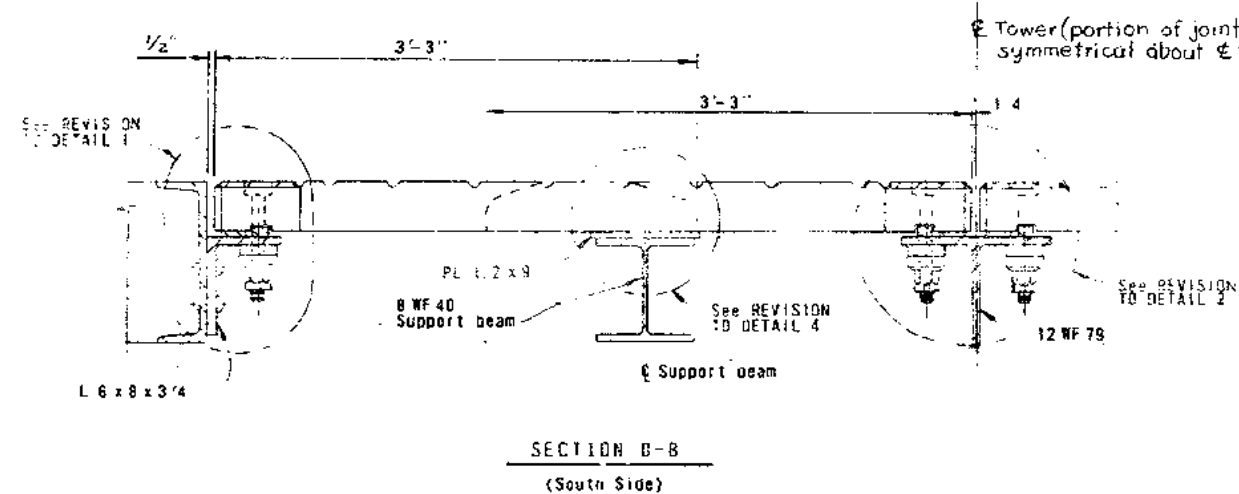
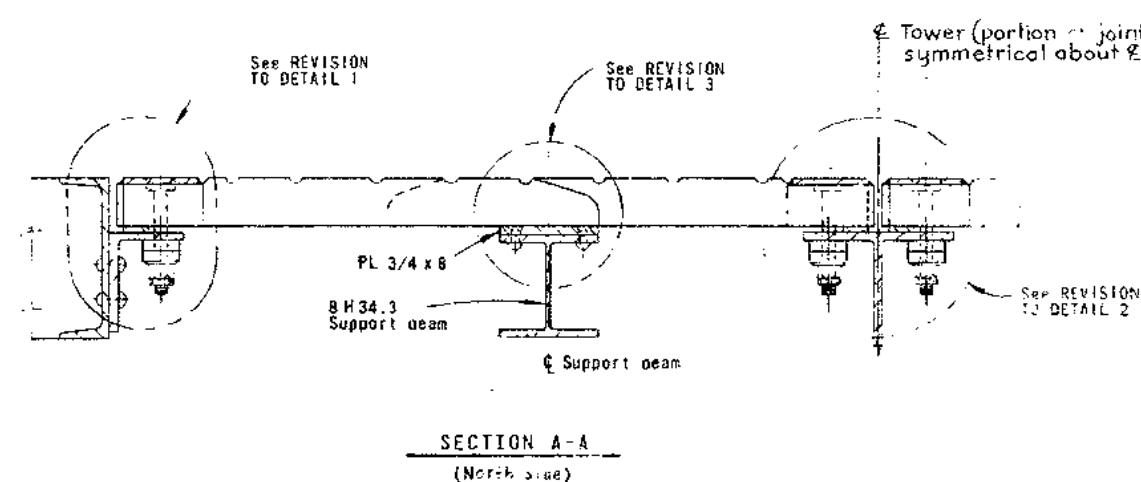
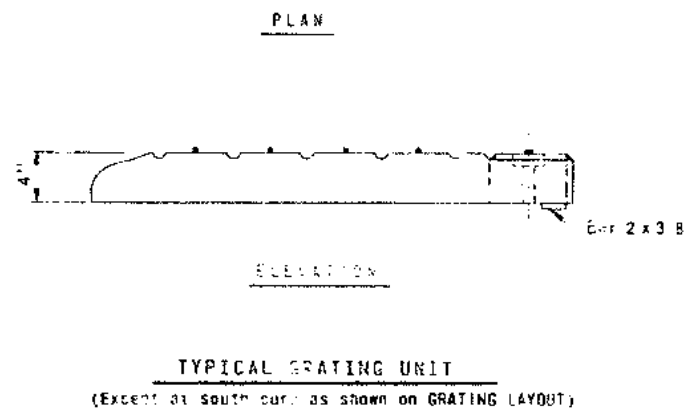
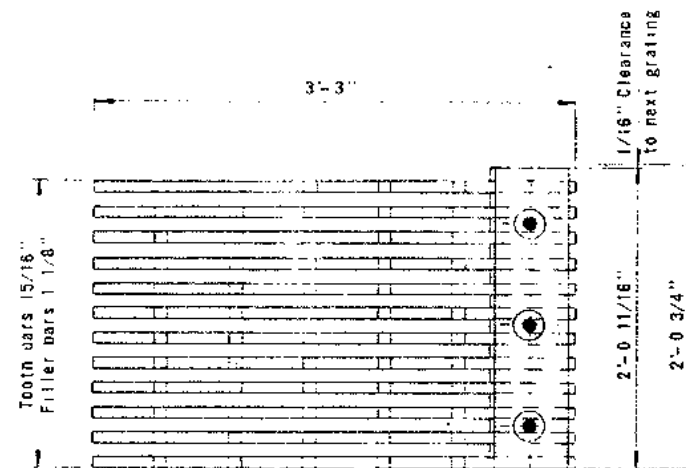
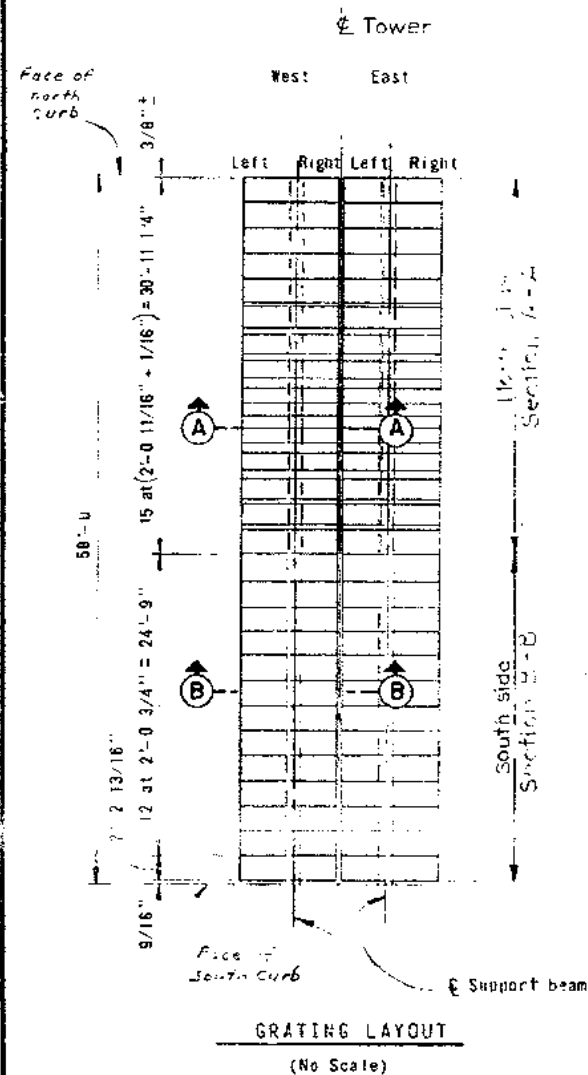
0 1 2 3 4  
SCALE IN INCHES ON ORIGINAL

NOTE

1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS, see sheet 13

579	As built without revision.	cfc	JR
DATE	REVISION	BY	CHK.

STATE OF CALIFORNIA - BUSINESS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION		APPROVED JULY 30, 1976	
DESIGNED BY: <i>E.W. Coble</i>	CHECKED BY: <i>E.W. Coble</i>	SAN FRANCISCO - OAKLAND BAY BRIDGE	
DRAWN BY: <i>E.W. Coble</i>	SUPVISED BY: <i>E.W. Coble</i>	RESURFACING LOWER DECK	
IN CHARGE OF DESIGN		MODIFICATIONS OF GRATING SUPPORTS	
LAYOUT AND DETAILS - PIERS W1 EAST, W4, Y.B.A.		SCALE UNLESS NOTED 1/2" = 1'-0"	
DRAWING NO. 04-025204-14R		SHEET NO. 14	



NOTE  
1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS, see sheet 13.

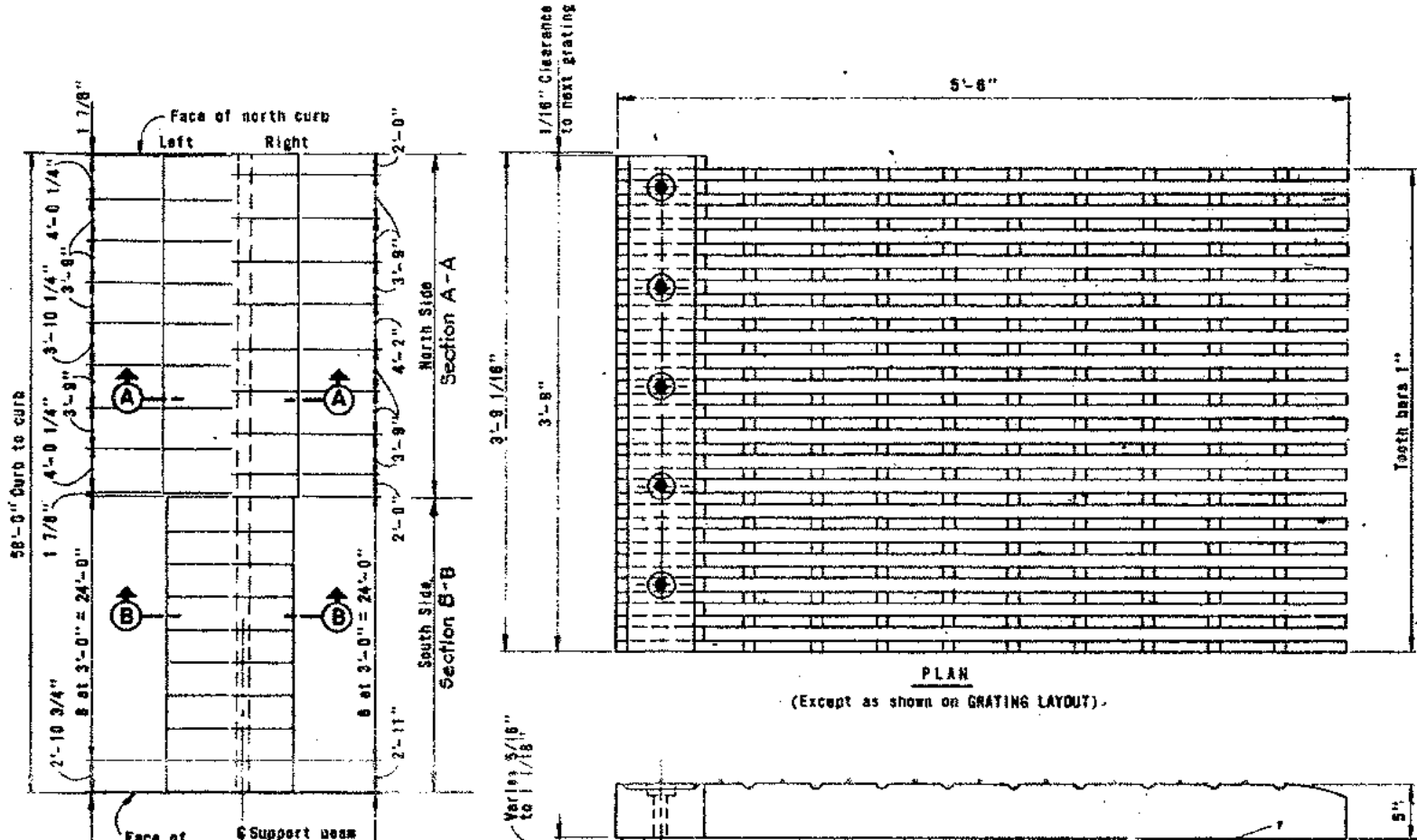
CONTRACT NO. 04-025204  
DATE ACCEPTED  
**AS BUILT**  
RESIDENT ENGINEER E.W. GOBLE  
REVISIONS BY C.F. CIELOHA DATE 5-79

0 1 2 3 4  
SCALE IN INCHES ON ORIGINAL

STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN	BY <i>W.H. Brown</i>	CHECKED	
REVISION	BY <i>W.H. Brown</i>	CHECKED	
SPECIFICATION	BY <i>W.H. Brown</i>	ESTIMATE	BY <i>W.H. Brown</i>
IN CHARGE OF DESIGN			
APPROVED JULY 30, 1976		S. Larsen	
SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING LOWER DECK MODIFICATIONS OF GRATING SUPPORTS		LAYOUT AND DETAILS PIERS #2, #3, #5, #6	
SCALE UNLESS NOTED 1 1/2" = 1'-0"		SHEET NO.	15
		DRAWING NO.	04-025204-15R

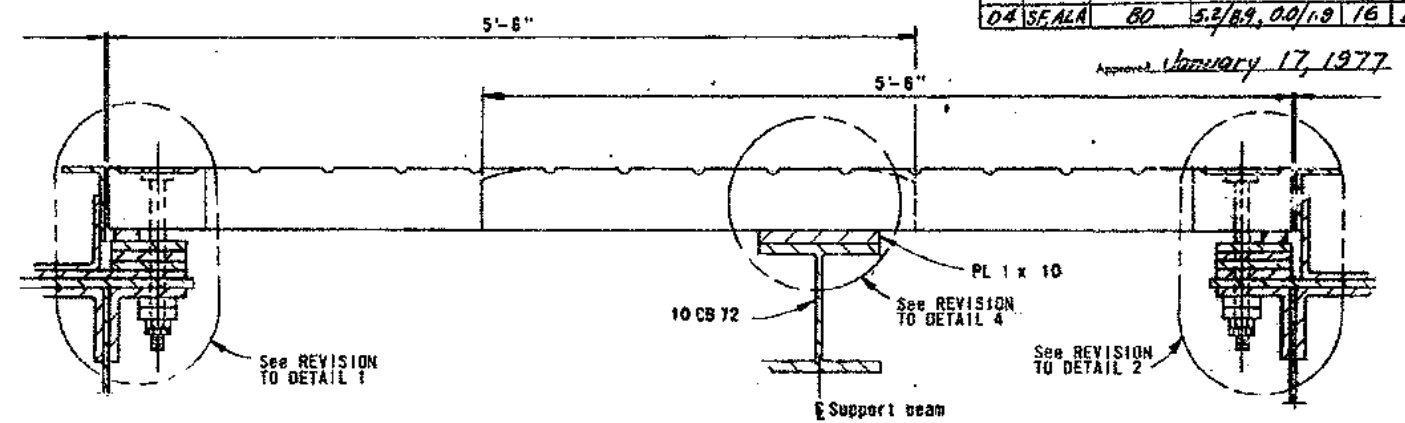
5-79 As built without revision. cfc JR  
MARK DATE REVISION BY C.V.L.

Approved January 17, 1977

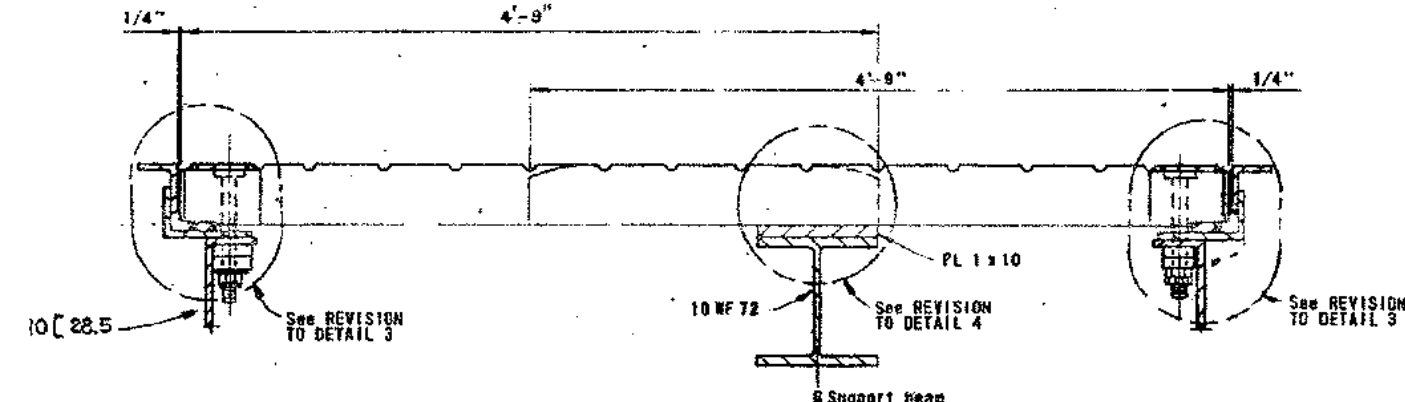


PLAN  
(Except as shown on GRATING LAYOUT)

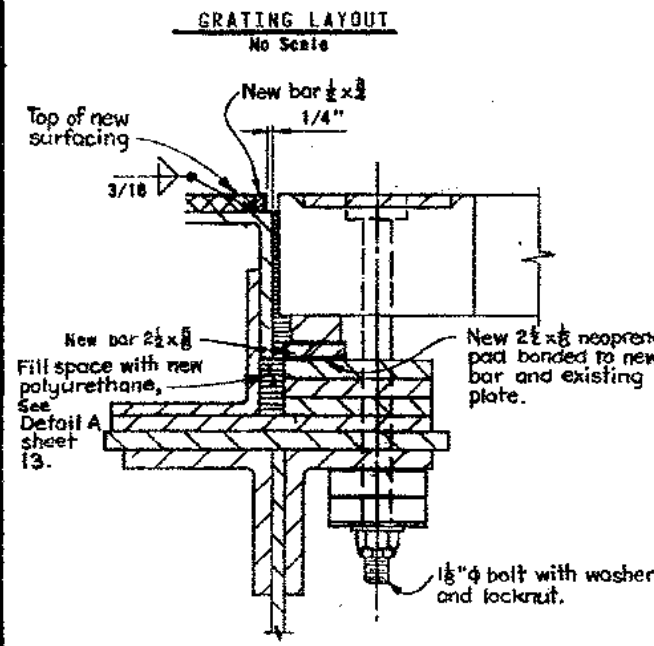
ELEVATION  
TYPICAL GRATING UNIT  
(North Side)



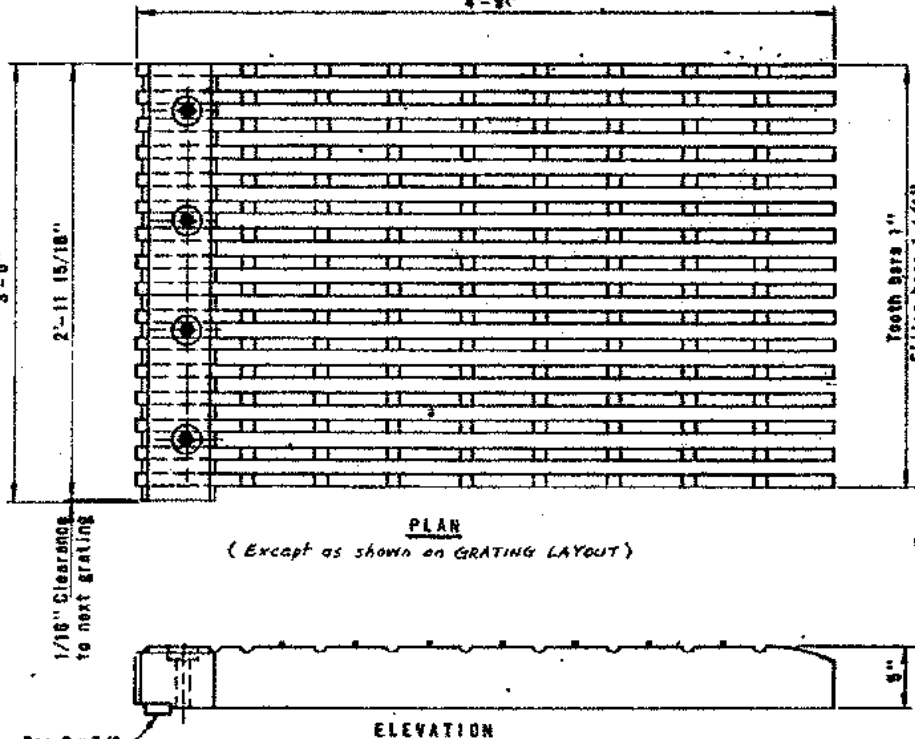
SECTION A-A  
(North Side)



SECTION B-B  
(South Side)

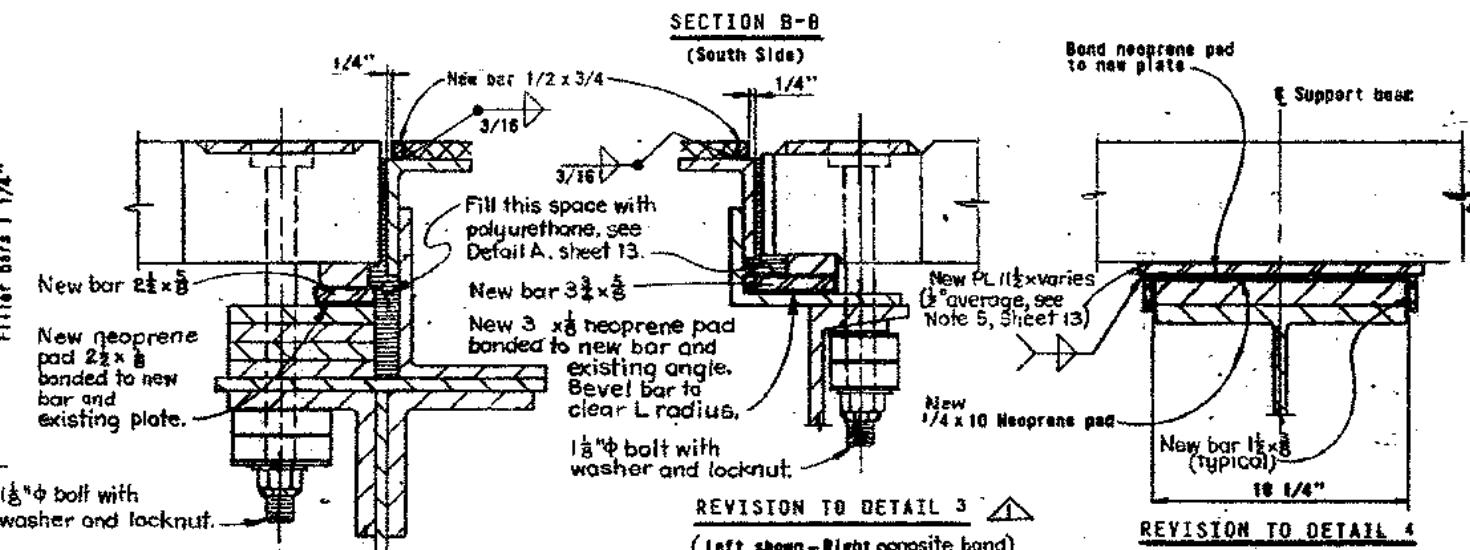


REVISION TO DETAIL 1  
Scale: 3" = 1'-0"



PLAN  
(Except as shown on GRATING LAYOUT)

ELEVATION  
TYPICAL GRATING UNIT  
(South Side)



REVISION TO DETAIL 2  
Scale: 3" = 1'-0"

REVISION TO DETAIL 3  
(Left shown - Right opposite hand)  
Scale: 3" = 1'-0"

REVISION TO DETAIL 4  
Scale: 3" = 1'-0"

NOTE

1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS, see sheet 13.

CONTRACT NO.	04-025204
DATE ACCEPTED	
AS BUILT	
RESIDENT ENGINEER E.W. COBLE	
REVISIONS BY: E. CLEMONA DATE: 5-79	

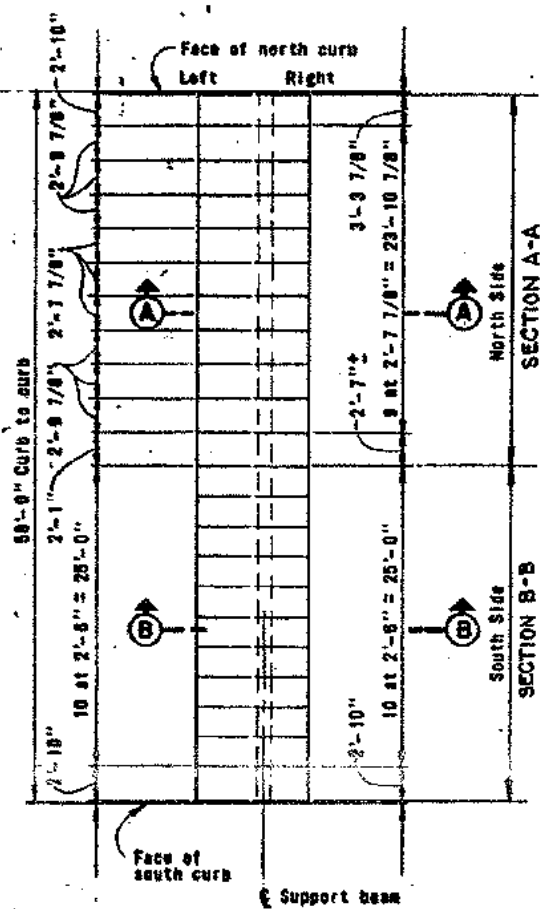


STATE OF CALIFORNIA — HIGHWAYS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION	
DESIGNED BY: J. F. BORG	CHECKED BY: J. F. BORG
DRAWN BY: J. F. BORG	CHECKED BY: J. F. BORG
IN CHARGE OF DESIGN: J. F. BORG	DATE: 7-30-1976
SAN FRANCISCO — OAKLAND BAY BRIDGE	
RESURFACING LOWER DECK	
MODIFICATIONS OF GRATING SUPPORTS	
LAYOUT AND DETAILS — PIER E4	
UNLESS NOTED	1 1/2" = 1'-0"
16	04-025204-16R

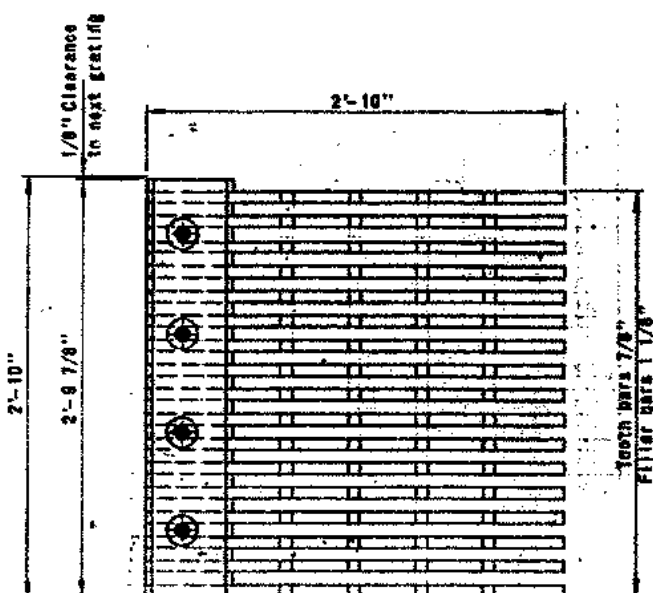
579 As built with revision.	cfc/JK
DATE	BY

Approved January 17, 1977

DATE	CITY	ROUTE	POST MILE - TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04-87-ALA	BO	52/89	00/19	17	21



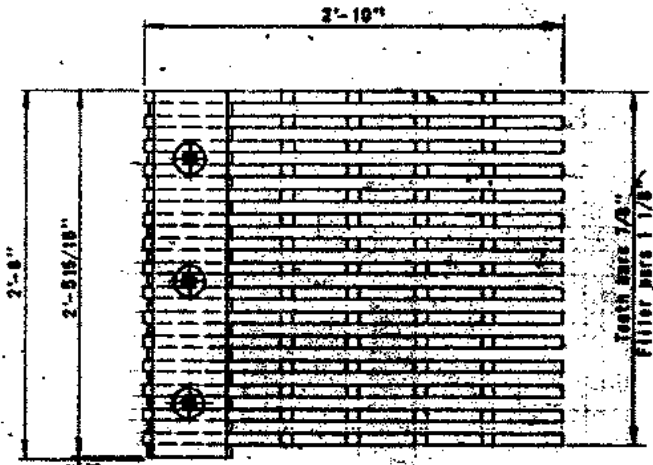
GRATING LAYOUT  
No Scale



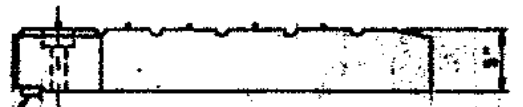
PLAN  
(Except as shown on GRATING LAYOUT)



ELEVATION  
TYPICAL GRATING UNIT  
(North Side)

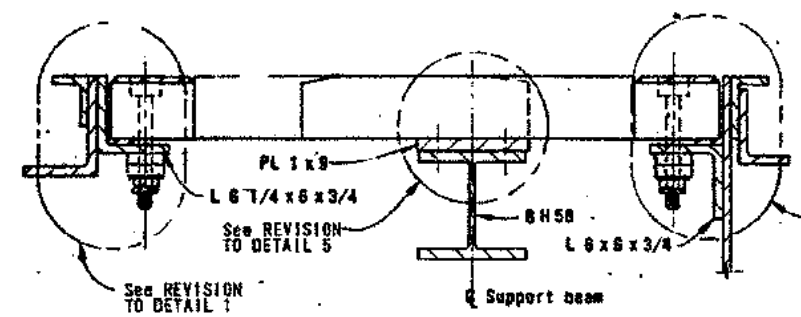


PLAN  
(Except as shown on GRATING LAYOUT)

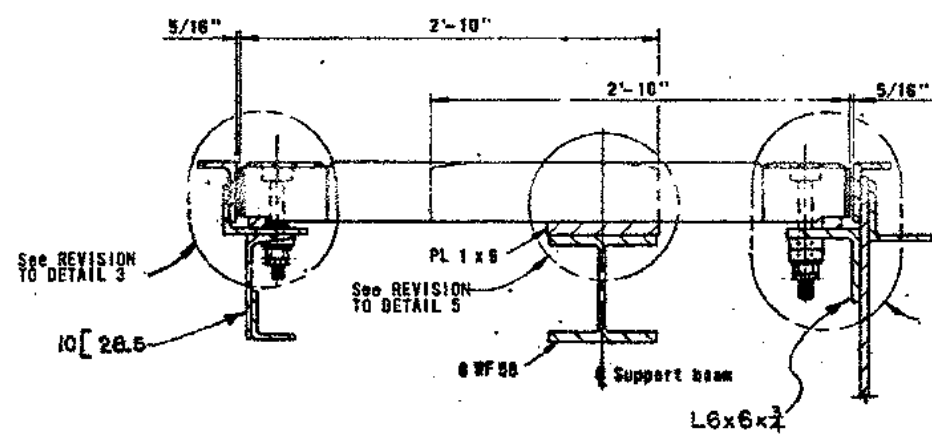


ELEVATION  
TYPICAL GRATING UNIT  
(South Side)

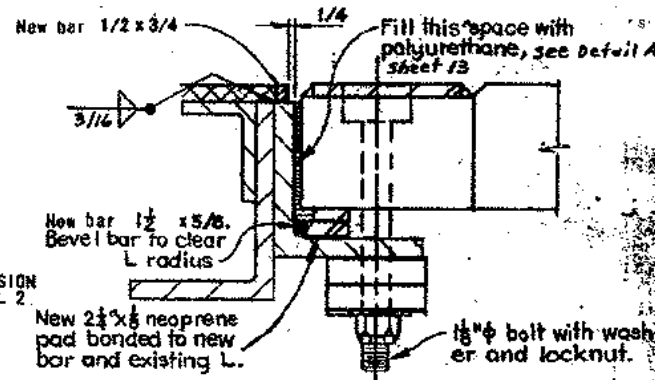
NOTE  
1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS, see sheet 13.



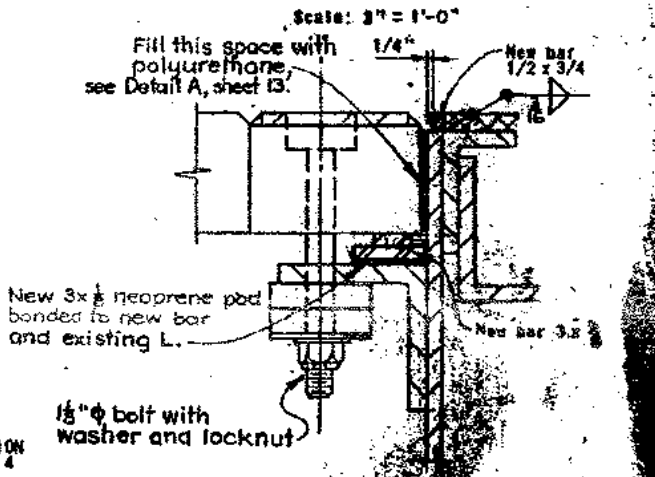
SECTION A-A  
(North Side)



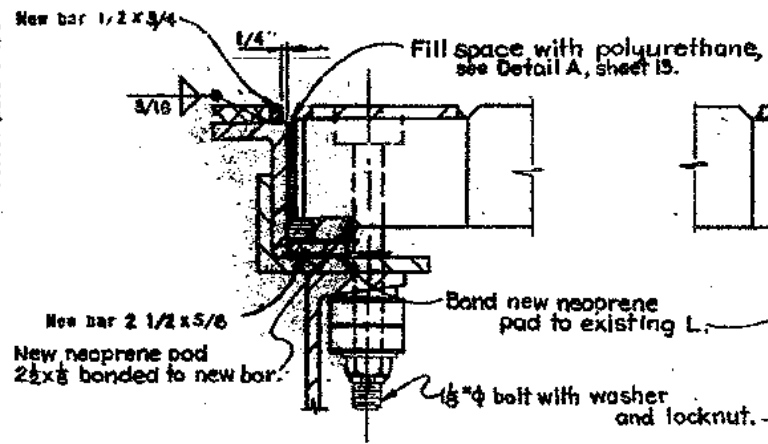
SECTION B-B  
(South Side)



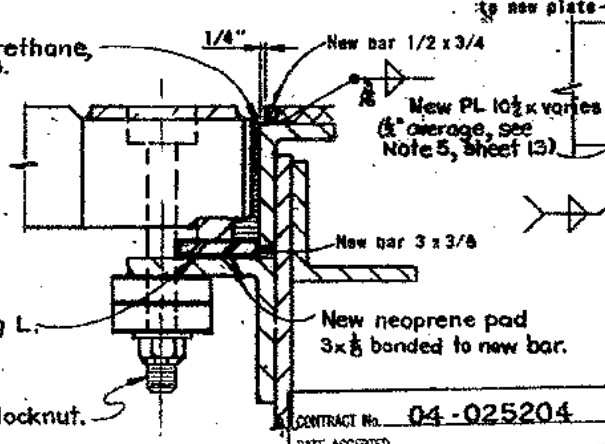
REVISION TO DETAIL 1  
Scale: 3" = 1'-0"



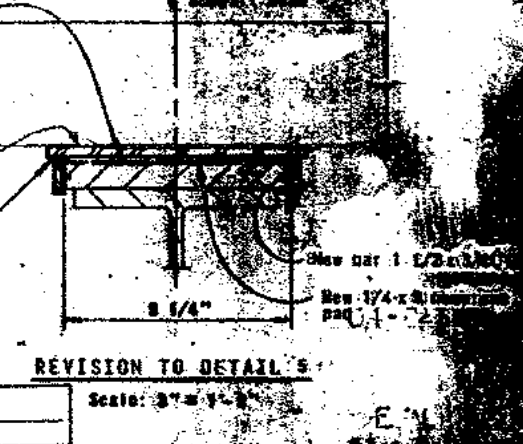
REVISION TO DETAIL 2  
Scale: 3" = 1'-0"



REVISION TO DETAIL 3  
Scale: 3" = 1'-0"



REVISION TO DETAIL 4  
Scale: 3" = 1'-0"

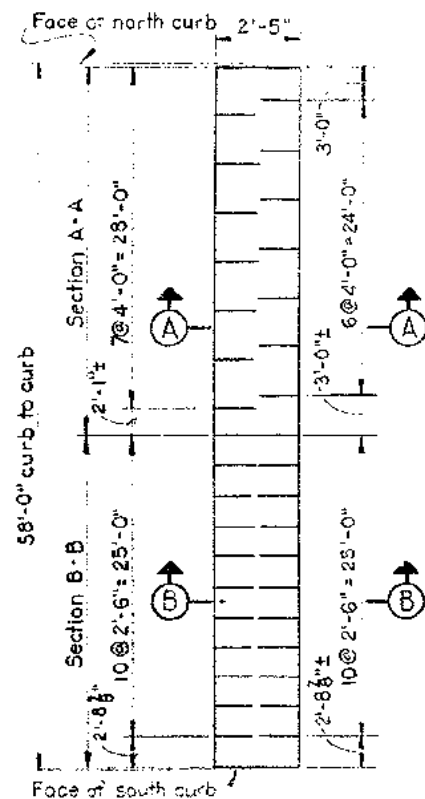


REVISION TO DETAIL 5  
Scale: 3" = 1'-0"

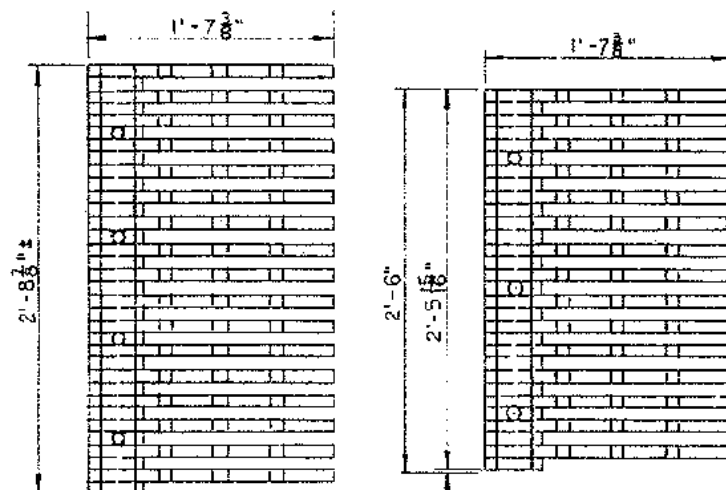
CONTRACT NO. 04-025204  
DATE ACCEPTED  
AS BUILT  
E.W. COBLE  
REVISIONS BY C.F. CIOLOHA DATE 5-79

STATE OF CALIFORNIA - HIGHWAYS AND TRANSPORTATION AGENCY - DEPARTMENT OF TRANSPORTATION	
PROJECT NO. 04-025204	DATE 5-79
DESIGNED BY C.F. CIOLOHA	DATE 5-79
CHECKED BY C.F. CIOLOHA	DATE 5-79
APPROVED BY C.F. CIOLOHA	DATE 5-79
SAN FRANCISCO - OAKLAND BAY BRIDGE RESURFACING LOWER DECK MODIFICATIONS OF GRATING SUPPORTS LAYOUT AND DETAILS - PIER #11	
SCALE OF DRAWING: 1/2" = 1'-0"	SCALE OF MODEL: 1/2" = 1'-0"
17	04-025204-17R

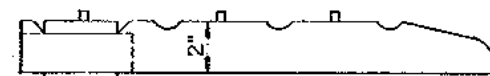




GRATING LAYOUT  
No Scale

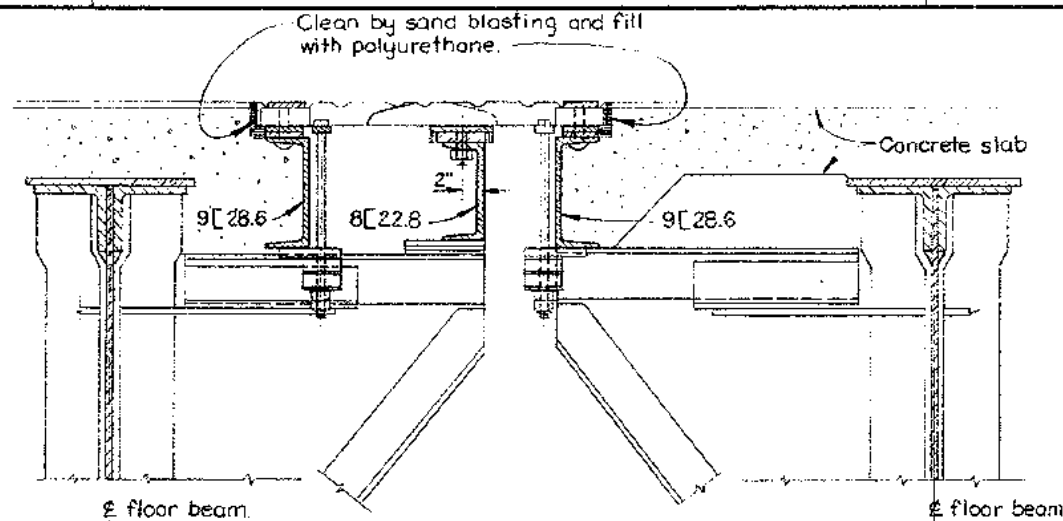


PLAN - SOUTHSIDE  
No Scale

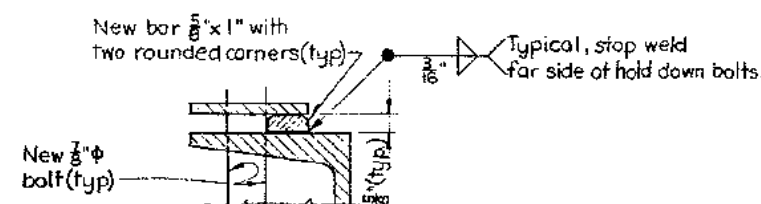


ELEVATION  
Scale: 3" = 1'-0"

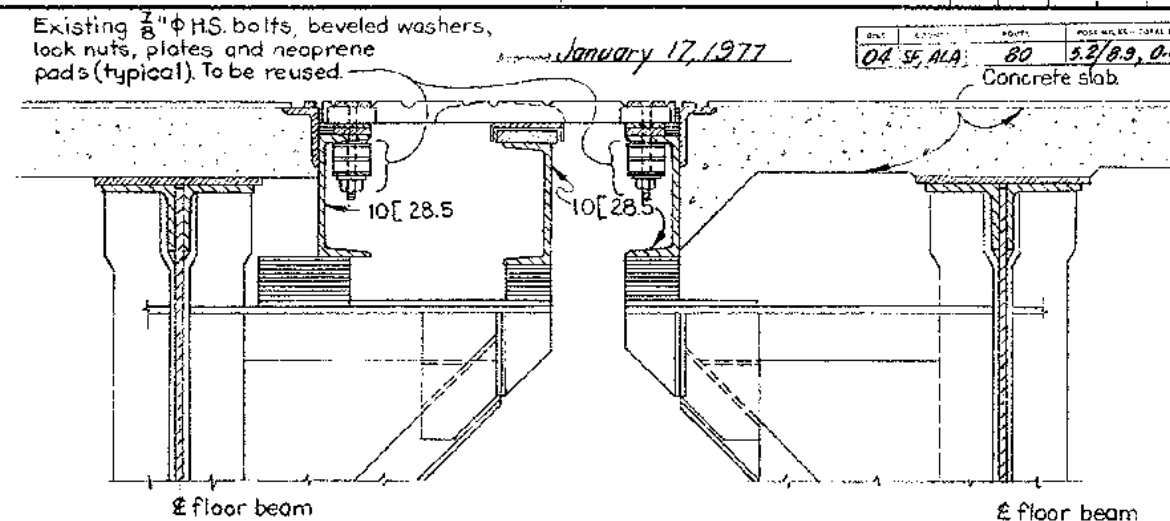
GRATING UNITS



SECTION A-A

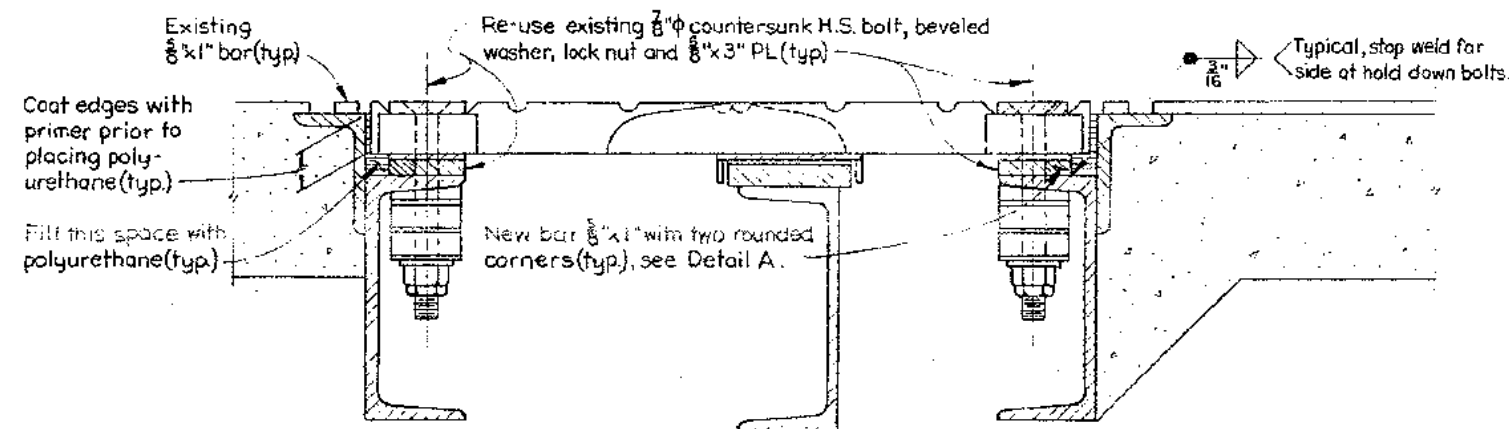


DETAIL A  
No Scale



SECTION B-B

(Reuse existing HS bolt assemblies in accordance with special provisions section 10-1.13 B, field work)



REVISION TO SECTION B-B

Scale: 3" = 1'-0"  
(Reuse existing HS bolt assemblies in accordance with special provisions section 10-1.13 B, field work)

NOTE

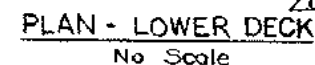
1. For GENERAL NOTES FOR MODIFICATIONS OF GRATING SUPPORTS, see sheet 13.

CONTRACT No.	04-025204
DATE ACCEPTED	
<b>AS BUILT</b>	
DESIGNED BY	E.W. COBLE
CHECKED BY	G.E. CIELONA
DATE	3-1-77



STATE OF CALIFORNIA — BUSINESS AND TRANSPORTATION AGENCY — DEPARTMENT OF TRANSPORTATION			
DESIGN	BY W.H. Jones	CHECKED	W.H. Jones
DRAWN	W.C.F. CIELONA	CHECKED	W.H. Jones
IN CHARGE OF DESIGN	W.C.F. CIELONA	DATE	3-1-77
APPROVED July 30, 1976		S. Larson	
SAN FRANCISCO-OAKLAND BAY BRIDGE RESURFACING LOWER DECK MODIFICATIONS OF GRATING SUPPORTS LAYOUT AND DETAILS-PIER YB3			
SCALE	UNLESS NOTED 1 1/2" = 1'-0"	SHEET NO.	18
DRAWING NO.		04-025204-18R	

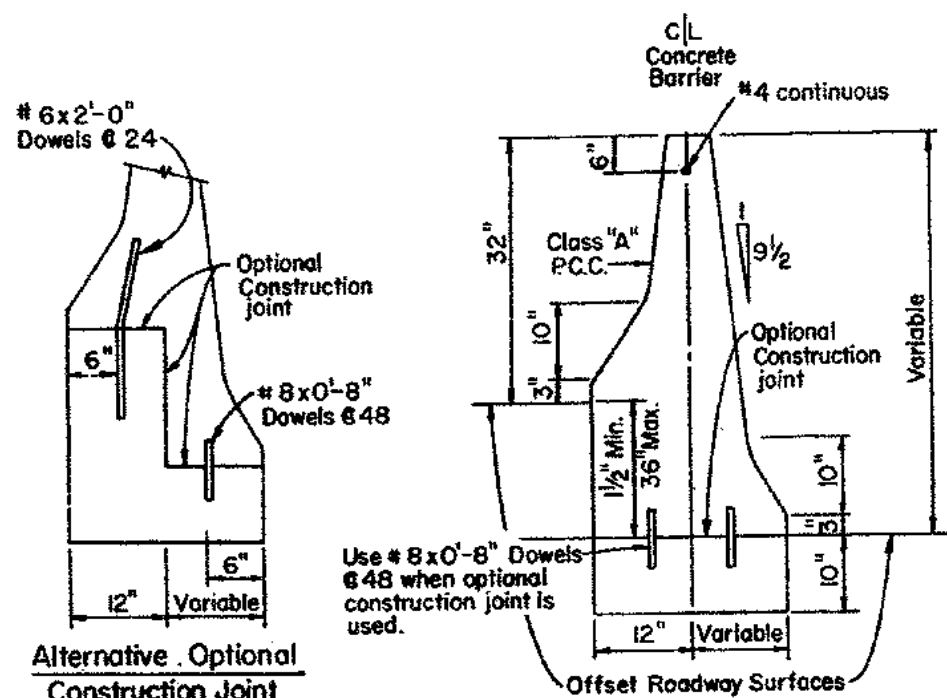
MARK	DATE	REVISION	BY	CHECK
5-73		As built with revision	cfc	RL



1. Joint filled with surfacing material.
2. (A) denotes type of deck joint
3. For details of deck joint types see Sheets 10 and 11 of the contract plans
4. Remove the entire existing roadway surfacing between YB2 and E2, approximately  $\frac{3}{4}$ " thick
5. This Plan is supplement to Sheet 11.
6. This Plan is not part of this Sheet 19.

CHIEF TRAFFIC BRANCH  
REGISTERED CIVIL ENGINEER NO. 11210

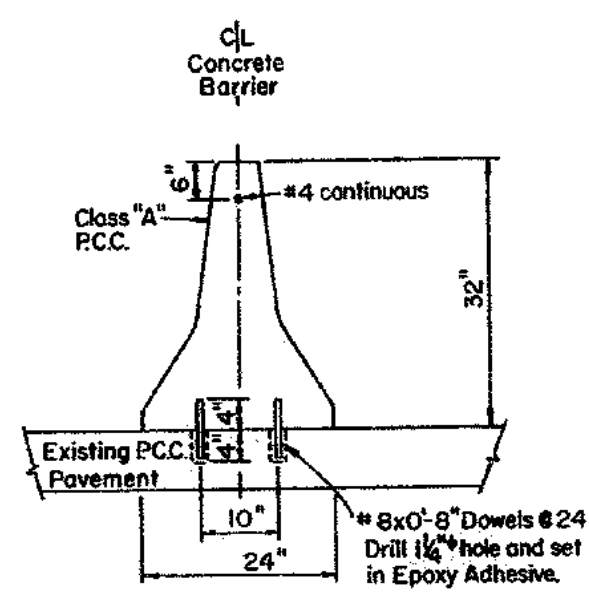
APPROVED June 21, 1976



Alternative . Optional  
Construction Joint

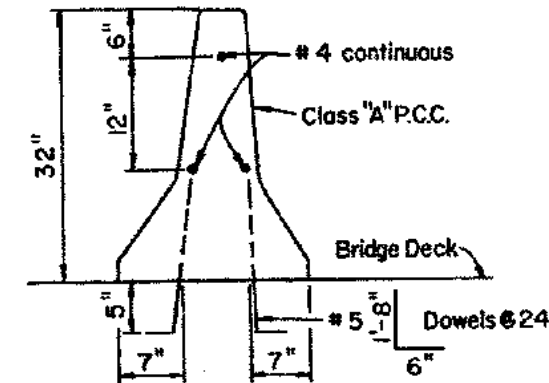
**CONCRETE BARRIER  
(TYPE 50C)**

For Offset or Superelevated Roadways  
(Details similar to Type 50 except as noted)



**CONCRETE BARRIER  
(TYPE 50B)**

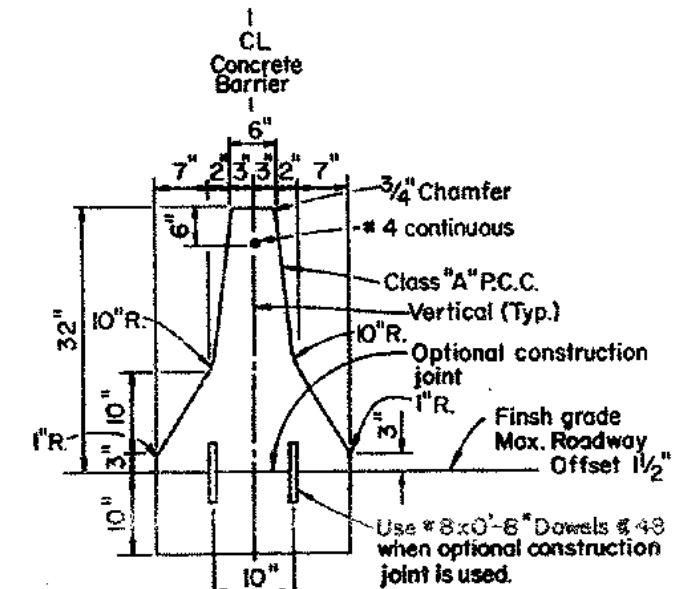
Placed on Existing P.C.C. Pavement.  
(Details similar to Type 50 except as noted.)



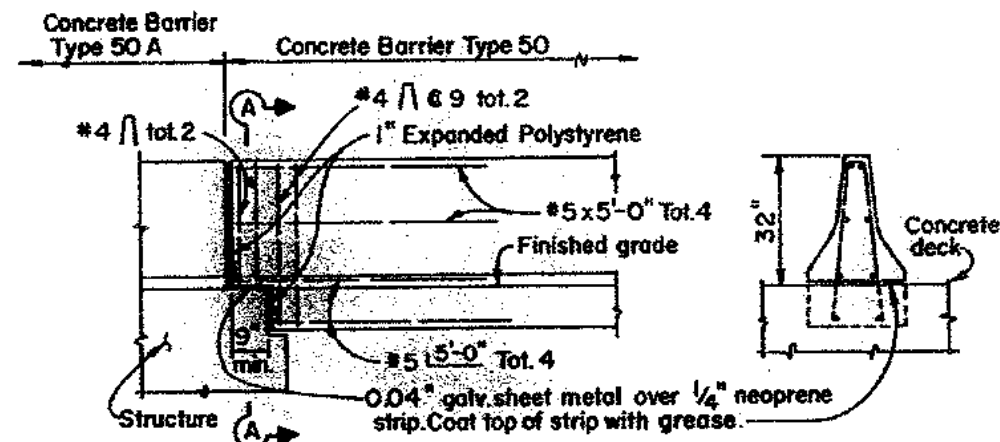
NOTE: Expansion joints in concrete barrier shall be located at all deck, pavement and principal wall joints. Expansion joint filler material shall be the same size as joint or 1/2" minimum.

**CONCRETE BARRIER  
(TYPE 50A)**

Placed on New Structures  
(Details similar to Type 50 except as noted.)



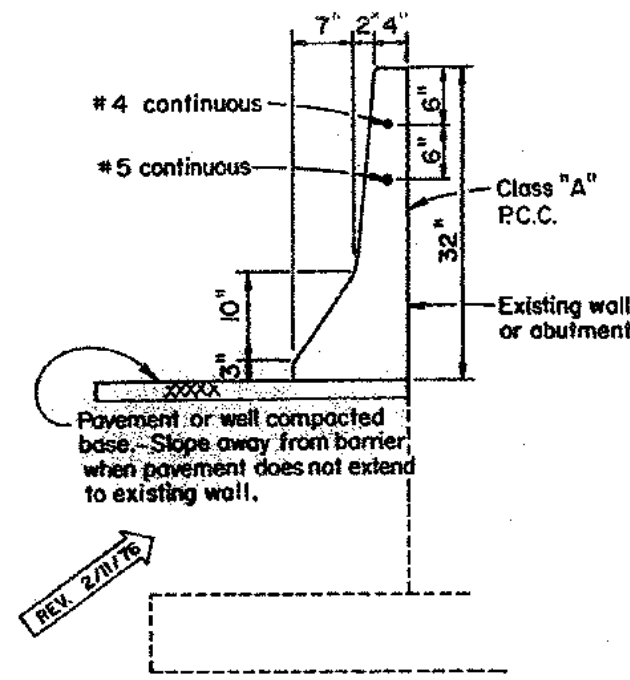
**CONCRETE BARRIER  
(TYPE 50)**



**ELEVATION**

**SECTION A-A**

**CONNECTION TO STRUCTURE**



**CONCRETE BARRIER  
(TYPE 50D)**

Placed on Face of Existing Structure  
(Details similar to Type 50 except as noted.)

**GENERAL NOTES**

1. See Standard Plans A75-B for Transition at Bridge Column or Sign Pedestal, Type 50E Barrier, Glare Screen Attachment Details and A77-B for additional Headlight Glare Screen Details.
2. Openings into existing drainage inlets shall not extend above the 3-inch vertical face at bottom of the barrier.
3. Where the barrier is added to the face of an existing concrete structure match existing weep holes.
4. Contractor may submit alternative details for Engineer's approval.

NOTE:

This plan sheet supersedes plan sheet A75-A.3 page 18 of the Standard Plans dated January, 1975.

CONTRACT NO.	04-025204
DATE ACCEPTED	
<b>AS BUILT</b>	
RESIDENT ENGINEER E.W. CORLE	
REVISIONS BY C.E. CHLOHA DATE 5-79	

SPECIAL DETAILS

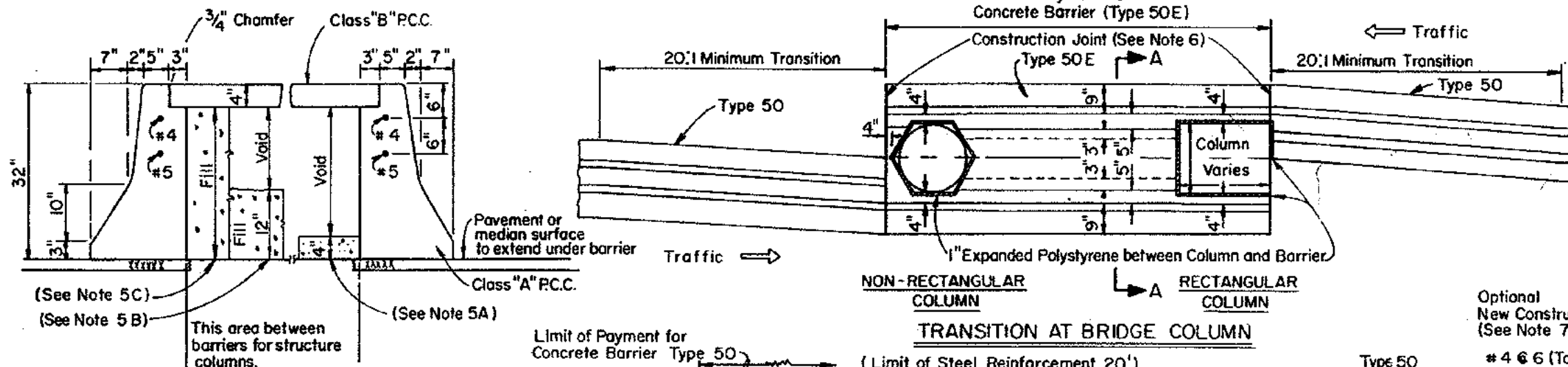
04-025204-20 R

**CONCRETE BARRIER TYPE 50**

6-79	AS built without revision	cfc	JL
MARK/DATE	REVISION	BY	CHK

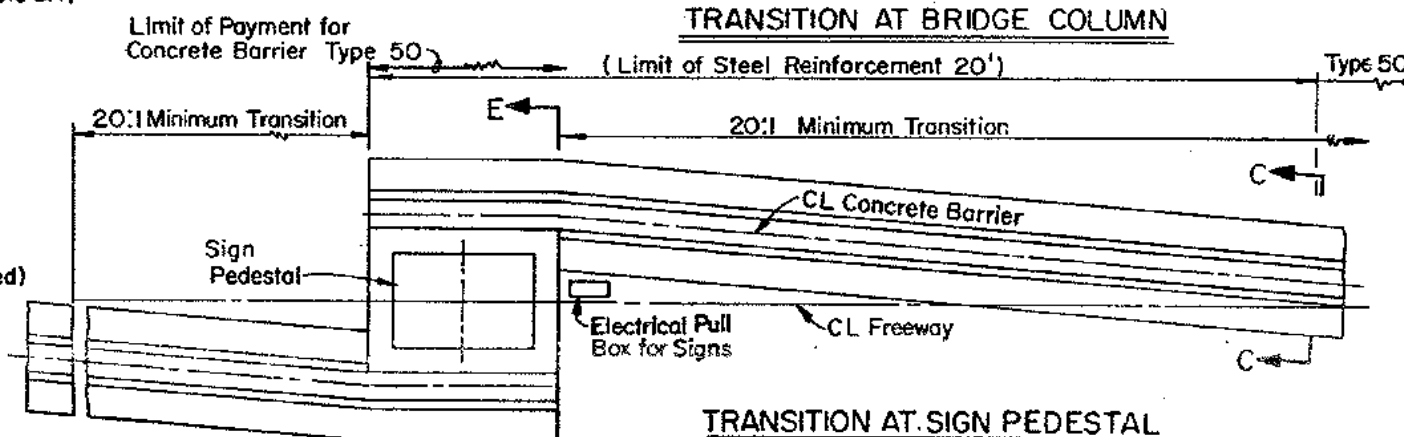
CHIEF TRAFFIC BRANCH  
REGISTERED CIVIL ENGINEER NO. 11210

APPROVED June 21, 1976

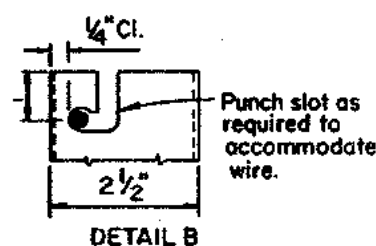


CONCRETE BARRIER  
SECTION A-A  
(TYPE 50E)

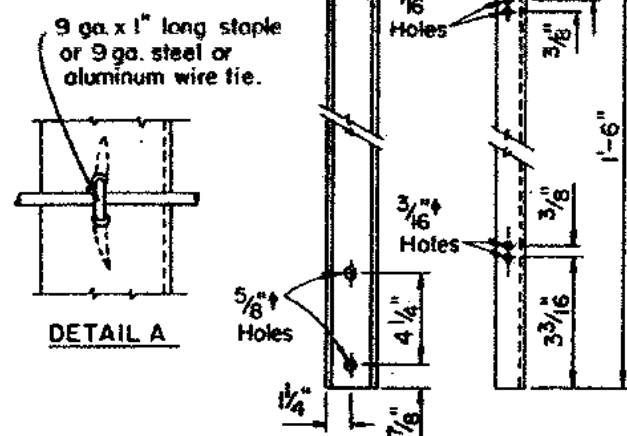
(Details similar to Type 50 except as noted)



TRANSITION AT SIGN PEDESTAL



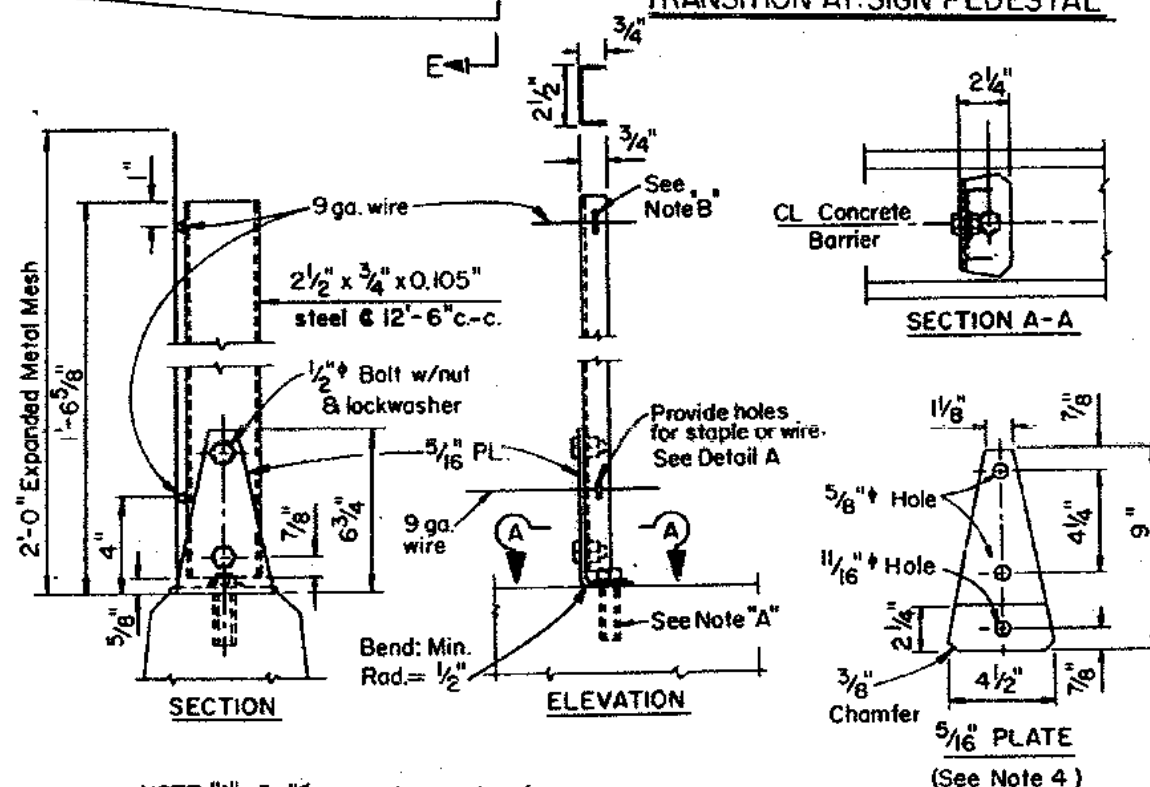
DETAIL B



DETAIL A

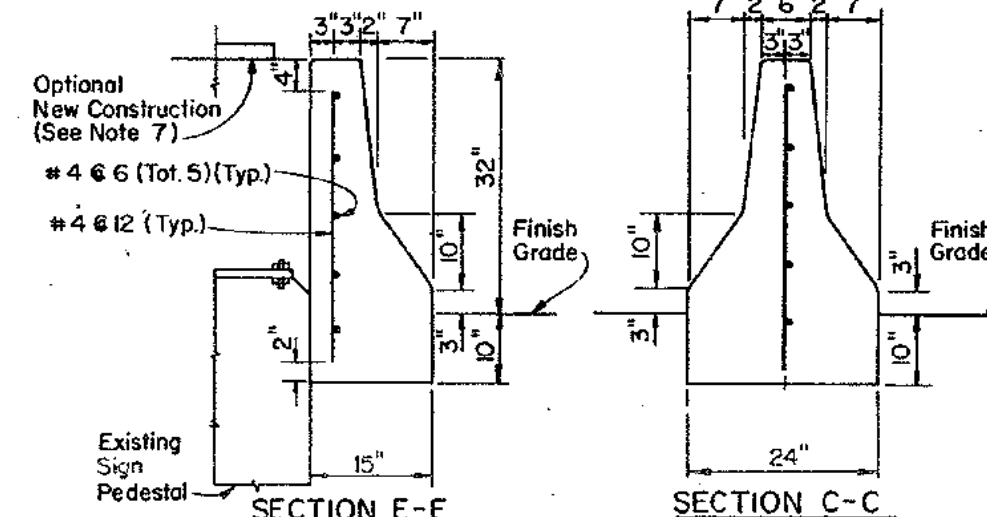
GLARE SCREEN POST  
DETAILS

GLARE SCREEN ATTACHMENT DETAILS - CONCRETE BARRIER TYPE 50



NOTE "A" 5/8" expansion anchor (non-corrodible). Hole depth and diameter to be determined by manufacturer's specification.

NOTE "B" Detail B may be used in place of Detail A.



GENERAL NOTES

1. Omit expanded mesh panel at approximately 600' intervals. Vary spacing to provide an opening at each structure crossing over highway.
2. See Standard Plan A77-B for additional Headlight Glare Screen Details.
3. See Standard Plan A75-A for Concrete Barrier Type 50.
4. 5/16" Plate to conform to A.S.T.M. A36 Specifications.
5. Contractor Options for fill between barrier walls:
  - A. Place 4" Class "B" P.C.C. at base between barrier walls.
  - B. Place 12" of granular material at base between walls.
  - C. Place granular material from base to bottom of 4" cap. (Forming material for 4" cap may remain in place under options A & B).
6. Reinforcing Steel #4 & #5 bars shall extend continuous through construction joints. #5 bars doweled 30 diameter minimum into Type 50 barrier.
7. See "Lighting Plans" for Sign Pedestal Elevations on New Construction.

## NOTE:

This plan sheet supersedes plan sheet A75-B page 19, SDA75-B.1 (Letter dated May 23, 1975) and SDA75-B.2 (Letter dated November 28, 1975) of the Standard Plans dated January, 1975.

CONTRACT NO. 04-025204  
DATE ACCEPTED  
**AS BUILT**  
RESIDENT ENGINEER E.W. COBLE  
REVISIONS BY C.F. CIELOHA DATE 5-79

SPECIAL DETAILS

04-025204-21R

CONCRETE BARRIER TYPE 50

5-79	As built without revision.	cfc/JL
MARK DATE	REVISION	BY CHK